



Mary Taylor, CPA
Auditor of State

MAHONING COUNTY SOLID WASTE
MANAGEMENT DISTRICT
PERFORMANCE AUDIT

NOVEMBER 8, 2007



Mary Taylor, CPA
Auditor of State

To the Residents and County Commissioners of Mahoning County:

In an attempt to ensure efficient and effective services for its community and customers, the Mahoning County Commissioners (the County Commissioners) engaged the Auditor of State (AOS) to conduct a performance audit of the Mahoning County Solid Waste Management District (the District). As requested by the County Commissioners and the District, the three functional areas assessed in the performance audit were financial systems, human resources, and programs and contract management.

The performance audit contains recommendations which identify the potential for cost savings and efficiency improvements. The information contained within the report is intended to assist the District in its efforts to improve service delivery and optimize operational efficiency and effectiveness. The District is also encouraged to continually monitor and assess its operations to identify additional areas for improvements.

An executive summary has been prepared which includes the project history, objectives, scope, and methodology of the performance audit. The executive summary also includes a summary of noteworthy accomplishments, recommendations, and financial implications. The full audit report has been provided to the District, the County Commissioners and other appropriate officials. The District has been encouraged to use the results of the performance audit as a resource in improving its overall operations and service delivery.

Additional copies of this report can be requested by calling the Clerk of the Bureau's office at (614) 466-2310 or toll free at (800) 282-0370. In addition, this performance audit can be accessed online through the Auditor of State of Ohio website at <http://www.auditor.state.oh.us/> by choosing the "On-Line Audit Search" option.

Sincerely,

A handwritten signature in cursive script that reads "Mary Taylor".

Mary Taylor, CPA
Auditor of State

November 8, 2007

Executive Summary

Project History

The Mahoning County Commissioners engaged the Auditor of State's Office (AOS) to conduct a performance audit of the Mahoning County Solid Waste Management District (Mahoning County SWMD or the District) in order to help ensure efficient and effective services for its community and stakeholders. The overall objectives of this performance audit are to present findings based on data related to Mahoning County SWMD operations and to develop recommendations for improvement. The following areas were assessed in the performance audit:

- Financial Systems;
- Human Resources; and
- Recycling/Educational Programs and Contract Management.

District Overview

The District was established on December 21, 1988 to comply with House Bill 592 and Ohio Revised Code (ORC) sections 343.01 and 3734.52, which required all counties in Ohio to become part of a solid waste management district, either jointly with other counties or individually as a single county. The primary responsibility of a solid waste management district is to prepare, ratify, and implement a comprehensive solid waste management plan that ensures that residents of the county have access to adequate solid waste disposal capacity. Each district's plan must also ensure compliance with goals established by the Ohio EPA, which is the primary oversight authority for solid waste management districts in Ohio. These goals include achievement of a 25 percent reduction/recycling rate for residential and commercial waste, a demonstration that residents have adequate access to recycling opportunities and programs, and provision of reduction, reuse, and recycling education. Solid waste management districts are also required to meet certain goals related to the management and recycling/reduction of industrial waste.

Mahoning County SWMD serves a population of 252,660 in an area covering 415 square miles. The District operates as a department under the jurisdiction of the Mahoning County Commissioners. As specified in ORC section 343.01, the District must interact with the County Auditor when budgeting expenditures and making purchases, and the County Treasurer when budgeting revenues and collecting fees. The District is classified as a special revenue fund within Mahoning County's accounting structure and operates on a budget of approximately \$3.0 million annually. In accordance with ORC section 3734.57, the District's primary source of revenue consists of disposal fees that are levied on waste disposed in Mahoning County landfills.

Programs and wages are the largest expenditures in the District, representing approximately 65 percent of total expenditures in 2006.

The stated goal of the District is to reduce the reliance on landfills through the implementation of reuse and recycling programs. Some of the programs provided by the District include curbside recycling, drop-off centers where residents can dispose of recyclables, tire recycling, and household hazardous waste collection. In addition, the District provides educational resources to residents such as presentations to school districts, brochures and fliers at public events, and an informative website. The District uses 10.1 full-time equivalent employees and numerous contracted resources to provide these services to the residents of Mahoning County.

Objectives

A performance audit is defined as a systematic and objective assessment of the performance of an organization, program, function, or activity to develop findings, recommendations and conclusions. The overall objective of this performance audit is to assist the Mahoning County SWMD in identifying strategies to increase its efficiency and effectiveness. The following major assessments were conducted in this performance audit:

- Key financial management practices such as budgeting procedures, revenue and expenditure allocations, financial reporting, and internal controls were reviewed in the financial systems section.
- District-wide staffing levels, employee compensation, and benefit costs were core areas assessed in the human resource section.
- The District's recycling and educational programs, purchasing policies and procedures, and methods for monitoring vendor performance were reviewed in the programs and contract management section.

The performance audit was designed to develop recommendations that provide cost savings, revenue enhancements, and/or effectiveness and efficiency improvements. The recommendations comprise options that the District can consider in its continuing efforts to improve its services.

Scope and Methodology

This performance audit was conducted in accordance with Generally Accepted Government Auditing Standards. Audit work was conducted primarily between January 2007 and May 2007. To complete this report, the auditors gathered a significant amount of data pertaining to the Mahoning County SWMD, conducted interviews with numerous individuals associated with the District, and reviewed and assessed available information. Furthermore, status meetings were

held throughout the engagement to inform the District's administrators of key issues impacting audited areas, and to share proposed recommendations to improve or enhance operations. Finally, the District provided verbal and written comments in response to various recommendations, which were taken into consideration during the reporting process. Where warranted, AOS modified the report based on the District's comments.

In addition, several solid waste management districts were used to provide benchmark comparisons for the areas assessed in this performance audit. These include Clark County Solid Waste Management District, Lake County Solid Waste Management District, and Summit/Akron Solid Waste Management Authority. These entities were chosen based upon demographic and operational data as well as discussions with management at the Mahoning County SWMD. Furthermore, external organizations and sources were also used to provide comparative information and benchmarks, including the Government Finance Officers Association (GFOA), the State Employment Relations Board (SERB) and the Ohio Environmental Protection Agency (Ohio EPA).

The majority of information presented in this performance audit was obtained from the Ohio EPA. Because the Ohio EPA is a third-party source, AOS limited data reliability testing to discussing significant variances with management at Mahoning County SWMD and the peer organizations, and comparing the District's overall financial information to its audited financial statements. In areas where potential reporting errors were identified, the performance audit discloses the nature of the error and adjusts the assessments where necessary. As a result, the data used in the performance audit is considered materially reliable, particularly when considered in the context of the conclusions drawn in this report. The data obtained directly from the peer districts and other outside organizations (SERB, GFOA, etc) was not tested for reliability, although it was reviewed for reasonableness.

Due to timing issues associated with the Ohio EPA's filing requirements, an estimate of the tons recycled in 2006 (202,346) was provided by the District's management and subsequently used for certain assessments in this performance audit. However, the actual tons recycled became available near the conclusion of the audit. Although the District's actual tons recycled (193,320) in 2006 was approximately four percent lower than the original estimate, the assessments and conclusions included in this performance audit are still considered appropriate.

The Auditor of State and staff express their appreciation to the staff at Mahoning County SWMD, Clark County SWMD, Lake County SWMD, and Summit/Akron SWMA for their cooperation and assistance throughout this audit.

Noteworthy Accomplishments

Noteworthy accomplishments acknowledge significant accomplishments or exemplary practices. The following are key noteworthy accomplishments that were identified during the course of the performance audit.

Financial Systems

- **Budgetary Process:** The Mahoning County Commissioners and the Mahoning County SWMD have an effective process in place for developing, supporting and explaining the annual budget. The District also has procedures in place to obtain stakeholder input regarding the proposed budget. Specifically, the District has established a policy committee (Committee) that consists of the Mayor of Youngstown, one of the County Commissioners, the Health Commissioner, a township representative, and three citizens. The Committee meets monthly and makes suggestions to the District regarding achievement of the goals and objectives outlined in the comprehensive plan. The District's budget document and process are consistent with GFOA's recommended practices.
- **Long-Term Planning:** The District's comprehensive solid waste management plan projects a 15 year period and contains estimates of the remaining useful lives of each of the landfills, long-term strategies for reducing future reliance on these landfills, input from members of the community, and clearly defined goals and benchmarks for measuring success. The plan also indicates the District will have sufficient landfill space to meet its needs throughout the planning period (15 years). A representative of the Ohio EPA indicated that they were unaware of any non-compliance issues facing the District and credits District management for developing a quality comprehensive solid waste management plan. The Ohio EPA officially approved the District's solid waste management plan in March 2007, which signifies that the District's format complied with Ohio EPA requirements.
- **Local Business/School Relationships:** The District maintains a collaborative relationship with the Youngstown State University (YSU) and area businesses to promote recycling. For example, the District works with YSU to promote recycling by establishing and maintaining aluminum can and paper recycling bins at every building on campus, establishing a program whereby unwanted furniture is donated to area organizations rather than being disposed, and installing an in-vessel composting system that allows YSU to compost food waste. Additionally, in 2005, the District had 160 businesses committed to implementing recycling programs to collect paper, bottles and cans at no cost to the business.

Assessments Not Yielding Recommendations

In addition to the analyses presented in this report, assessments were conducted on several areas within the audit that did not warrant recommendations because Mahoning County SWMD was performing at a level comparable to the peers or industry standards. These areas are summarized below. Additional detail pertaining to these areas is presented in each section of the report.

- **Financial Systems:** Stakeholder Participation;
- **Human Resources:** Employee Policies and Compensation Levels; and
- **Programs and Contract Management:** Purchasing Policies and Contract Monitoring.

Recommendations

A summary of the recommendations identified in the performance audit is presented below. Additional detail is included in each section of the report.

Financial Systems

- The District should review its internal control structure for monitoring the amounts being disposed in the landfills. In particular, Mahoning County SWMD should consider negotiating with the landfill operators to install video surveillance equipment that can be used to monitor the weight measurement process, and to allow District staff to perform a landfill oversight function. These employees could be responsible for visiting each landfill on a daily basis, monitoring a sample of the weight measurement transactions for accuracy, ensuring that the surveillance equipment is working properly, and working with and overseeing the Health Department Monitors' review of the materials being disposed in the landfill.
- The District should negotiate to have the Board of Health and the Engineering Department submit invoices for actual services rendered rather than making annual transfers prior to completion of the work. This would promote accountability and better ensure that the District complies with ORC section 3734.57. The District should also consider negotiating annual contracts with the Board of Health rather than entering into fixed contracts for a three-year time period. This would provide the District with more flexibility to adjust the reimbursement/billing rate as conditions change.
- In addition to applying for Federal and State grants, the District should also actively research and apply for local grants that are offered by foundations and businesses.

- The District should work with the County Administrator and the County Commissioners to determine which financial reports should be prepared, submitted and discussed on a regular basis (e.g., budgetary and service/activity level summaries).
- The District should re-design its website to include more information regarding its programs, activities, and service levels. It should also use surveys as a method for obtaining input from citizens. This would help ensure that the District considers a broad range of input from a variety of sources.

Human Resources

- The District should not hire any additional staff. To ensure appropriate staffing levels in the future, the District should regularly monitor the recycling rates as they relate to staffing assignments. By taking measures to increase its recycling rates, the District would be able to improve staffing efficiency to be more comparable to the peers. However, if the District's recycling rates do not improve in the future, the District should review its staffing assignments and consider eliminating 2.5 FTEs or reallocating excess staff to provide landfill oversight.
- Prior to renewing the contract with Medical Mutual, the County should review the design of its health care plans to determine if cost savings can be achieved by modifying the more generous provisions. Specifically, the County should consider increasing employee co-pays for physician visits and prescription coverage and requiring employee annual deductibles, cost sharing for hospital visits, and annual out-of-pocket maximums. The County should also review employee contributions to monthly premiums and consider increasing them, particularly if it does not alter the plan benefits and/or encounters future financial difficulties.

Programs/Contract Management

- The District should perform an annual cost-benefit analysis of its recycling and educational programs to determine which are yielding the best results at the most effective price, and to help identify appropriate program changes. To facilitate the review, the Mahoning County SWMD should begin regularly monitoring each program in relation to cost and the impact on the annual recycling rates. In addition, the District should regularly use surveys to obtain citizen feedback on the effectiveness of specific programs. Along with the conducting cost-benefit analyses and citizen surveys, the District should review peer programs and relevant industry sources to help identify new programs, changes to current programs, and potential elimination of ineffective programs.

Summary of Financial Implications

The following table summarizes the performance audit recommendations that contain financial implications.

Summary of Financial Implications

Recommendation	Estimated Annual Cost Savings	Estimated Implementation Cost (One Time)	Estimated Implementation Cost (Annual)
R2.3 Purchase one camera for each of the three District landfills		\$2,400	\$240
R3.2 Review the design of the healthcare plan	\$4,800		
Totals	\$4,800	\$2,400	\$240

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Financial Systems

Background

This section of the performance audit focuses on financial systems at the Mahoning County Solid Waste Management District (Mahoning County SWMD or the District). The objective is to analyze the District's revenues and expenditures, management reporting, and internal controls, and develop recommendations for improvements. To illustrate various operational issues, comparisons are made to peer solid waste management districts and other applicable sources, such as the Government Finance Officers Association (GFOA) and the Ohio Environmental Protection Agency (Ohio EPA). The peers used in this performance audit include the Clark County Solid Waste Management District (Clark County SWMD), the Lake County Solid Waste Management District (Lake County SWMD) and the Summit/Akron Solid Waste Management Authority (Summit/Akron SWMA).

Organization Structure and Function

The Mahoning County SWMD was established on December 21, 1988 to comply with House Bill 592 and Ohio Revised Code (ORC) sections 343.01 and 3734.52, which require all counties in Ohio to become part of a solid waste management district, either jointly with other counties or individually as a single county. The primary responsibility of a solid waste management district is to prepare, ratify, and implement a comprehensive solid waste management plan that ensures that residents of the county have access to adequate solid waste disposal capacity. Each district's plan must also ensure compliance with the goals established by the Ohio EPA, which is the primary oversight authority for solid waste management districts in Ohio. These goals include achievement of a 25 percent reduction/recycling rate for residential and commercial waste, a demonstration that residents have adequate access to recycling opportunities and programs, and provision of reduction, reuse, and recycling education. Solid waste management districts are also required to meet certain goals related to the management and recycling/reduction of industrial waste.

The Mahoning County SWMD serves a population of 252,660 in an area covering 415 square miles. The stated goal of the District is to reduce the reliance on landfills through the implementation of reuse and recycling programs (see the **programs and contracts** section). The District operates as a department under the jurisdiction of the County Commissioners. As specified in ORC section 343.01, the District must work with the County Auditor's Office when budgeting expenditures and making purchases, and the County Treasurer's Office when budgeting revenues and collecting fees. The District is classified as a special revenue fund in

Mahoning County's accounting structure and operates on a budget of approximately \$3.0 million annually (based on 2006 expenditures).

Revenues and Expenditures

The majority of information presented in **Tables 2-1, 2-2** and **2-3** was obtained from the Ohio EPA as data is reported in a consistent fashion for each entity. Because the Ohio EPA is a third-party source, AOS limited data reliability testing to discussing significant variances with management at Mahoning County SWMD and the peer organizations, and comparing the District's financial data in **Tables 2-1** and **2-2** to its audited financial statements (see table notes). In areas where potential reporting errors were identified, the performance audit discloses the nature of the error and adjusts the assessments where necessary. Furthermore, the performance audit identifies factors impacting the comparisons in **Tables 2-1, 2-2** and **2-3**, which were further analyzed in this report and, in turn, helped ensure data reliability. As a result, the data contained herein is considered materially reliable, particularly when considered in the context of the conclusions drawn in this report.

Table 2-1 presents revenues by source for Mahoning County SWMD and the peers.

Table 2-1: Mahoning County SWMD and Peer District Revenues by Source

	Mahoning 2005	Mahoning 2006¹	Clark 2005	Lake 2005	Summit/Akron 2005	Peer Average
Disposal Fees	\$2,987,041	\$3,001,306	\$0	\$444,160	\$0	\$444,160
Generation Fees	\$0	\$0	\$701,181	\$0	\$2,594,885	\$1,648,033
Other	\$104,359	\$109,224	\$114,196	\$1,631,162 ²	\$294,898	\$680,083
Total Revenue	\$3,091,400	\$3,110,530	\$815,377	\$2,075,321	\$2,889,783	\$1,926,825
Population	252,660	252,660 ³	144,130	229,004	547,314	306,816
Total Revenue per Citizen	\$12.24	\$12.31	\$5.66	\$9.06	\$5.28	\$6.67
Tonnage Disposed	349,564	349,564 ³	107,737	279,409	532,472	306,539
Total Revenues per Ton Disposed	\$8.84	\$8.90	\$7.57	\$7.43	\$5.43	\$6.81
Tonnage Recycled	84,683	202,346	122,876	222,131	299,508	214,838

Source: Ohio EPA and Mahoning County SWMD

Note 1: Peer averages excluded peers reporting no revenues in the applicable categories

Note 2: The audited financial statements became available for Mahoning County during the course of this performance audit, which showed total revenues of approximately \$3.57 million for the SWMD. Although the discrepancy between the audited financial statement and Ohio EPA reported data could not be fully investigated due to timing issues, the discrepancy could be due to differences in the basis of accounting. Regardless, the discrepancy does not significantly impact the comparisons in **Table 2-1** or the ensuing analysis.

¹Due to timing issues, the 2006 information represents figures provided by the Mahoning County SWMD. These figures did not go through the Ohio EPA review procedures.

²This was the amount reported to the Ohio EPA. However, the Lake County SWMD indicated that the relatively high amount reported in other revenues may be due to a classification error. The Lake County SWMD could not provide a more accurate breakdown of revenue sources.

³The 2005 figure was used as 2006 data was not available during the audit.

Table 2-1 shows that the District's total revenues in 2005 and 2006 (approximately \$3.1 million in both years) are significantly higher than the 2005 peer average (approximately \$1.9 million). **Table 2-1** also shows that the District's revenues are higher than the peer average on a per citizen and per ton disposed basis. The higher revenues are due to Mahoning County disposing more trash in a landfill and the source of waste (in-district vs. out-of-district) that is accepted at the landfills.

The following explains each of the revenue sources depicted in **Table 2-1**:

- **Disposal Fees:** According to the Assistant Director, the tonnage disposed in **Table 2-1** reflects only in-district waste. **Table 2-1** shows that disposal fees (tipping fees) are the main source of revenue for the Mahoning County SWMD. In accordance with ORC section 3734.57, the District's tipping fees are derived from three sources that consist of the following:
 - The District charges \$1.50 per ton for the disposal of solid waste generated within Mahoning County SWMD at a sanitary landfill located in the District;

- The District charges \$1.50 per ton for the disposal of solid waste generated outside the boundaries of the State at a sanitary landfill located in the District; and
- The District charges \$3.00 per ton for the disposal of solid waste generated outside the boundaries of the District but inside the State at a sanitary landfill located in the District.

Only one of the peers, Lake County SWMD, generates revenue from disposal fees. The Lake County SWMD levies fees at a rate of \$2.00 per ton for waste generated in-district and out-of-state that is disposed in Lake County. The Lake County SWMD also levies \$4.00 per ton for waste disposed in Lake County that was generated outside of the District but within Ohio. Although the Mahoning County SWMD made significant improvements in the tonnage recycled in 2006, the District's disposal fee revenues still increased slightly. This is due to the District accepting more waste generated from out-of-district sources than in previous years. The Summit/Akron SWMA and the Clark County SWMD do not receive disposal fees as there are no active landfills within their boundaries.

- **Generation Fees:** For solid waste management districts that do not have landfills within their boundaries, ORC section 3734.57 permits the district to levy a generation fee on the waste generated within a district's borders, regardless of where the waste is disposed. The fee is collected by the first solid waste facility to which the waste is delivered. This includes transfer stations, landfills, incinerators, and energy recovery facilities. The Summit/Akron SWMA and the Clark County SWMD primarily use this revenue source to fund their activities as they do not have active landfills within their boundaries. The Mahoning County SWMD has three landfills within its boundaries while the Lake County SWMD has one.
- **Other:** The District generates additional revenue through a joint use agreement with the Cuyahoga County Solid Waste Management District (Cuyahoga County SWMD). This agreement allows the Cuyahoga County SWMD to dispose waste at Mahoning County landfills for a tipping fee of \$1.50 per ton, instead of the usual \$3.00 per ton that would be charged for waste generated outside the District's boundaries. The Mahoning County SWMD agreed to the lower rate to encourage Cuyahoga County waste haulers to dispose in Mahoning County landfills, which helps ensure a consistent source of tipping fees for the District. The other revenue line-item accounts for grant and interest receipts for the Clark County SWMD and the Summit/Akron SWMA. The Director of the Lake County SWMD was unsure as to why the other revenues were so high and indicated that it may be due to a line-item classification error on the reports filed with the Ohio EPA.

Table 2-2 presents expenditures by function for the Mahoning County SWMD and the peers.

Table 2-2: Mahoning County SWMD and Peer District Expenditures

	Mahoning 2005	Mahoning 2006 ¹	Clark 2005	Lake 2005	Summit/Akron 2005	Peer Average
Population	252,660	252,660	144,130	229,004	547,314	306,816
Expenditures:						
Personnel	\$663,582	\$565,235	\$227,518	\$234,483	\$414,653	\$292,218
Office Overhead	195,654	91,893	56,715	15,603	98,063	56,794
Plan Consulting	25,358	21,240	43,105	0	8,903	26,004
Programs	1,964,118	1,418,436	181,571	1,707,356	1,895,299	1,261,409
Health Dept. Enforcement	455,624	455,624	67,167	117,879	262,277	149,108
Road Maintenance	250,000	415,000	0	0	0	0
Law Enforcement	60,000	60,000	276,275	0	2,476	139,375
Other	20,000	2,292	0	0	0	0
Total	\$3,634,336	\$3,029,719	\$852,351	\$2,075,321	\$2,681,671	\$1,869,781
Expenditures per Citizen	\$14.38	\$11.99	\$5.91	\$9.06	\$4.90	\$6.63
Tonnage Recycled	84,683	202,346	122,876	222,131	299,508	214,838
Expenditures per Ton Recycled	\$42.92	\$14.97	\$6.94	\$9.34	\$8.95	\$8.41

Source: Ohio EPA and Mahoning County SWMD

Note 1: Peer averages excluded peers reporting no revenues in the applicable categories.

Note 2: The audited financial statements became available for Mahoning County during the course of this performance audit, which showed total expenditures of approximately \$3.71 million for the SWMD. Although the discrepancy between the audited financial statement and Ohio EPA reported data could not be fully investigated due to timing issues, the immaterial discrepancy could be due to differences in the basis of accounting. As a result, the expenditures reported by the Ohio EPA are considered to be materially reliable for use in this performance audit.

¹Due to timing issues, the 2006 information represents figures provided by the Mahoning County SWMD. These figures did not go through the Ohio EPA review procedures.

Table 2-2 shows that the District's total expenditures per citizen and total expenditures per ton recycled for both 2005 and 2006 exceeded the peer averages for 2005. This is primarily due to the following:

- Recycling Rates/Programs:** Table 2-2 shows that in 2005, the District achieved lower recycling rates (85,000 tons) than the peer average (215,000 tons) despite spending more (\$2.0 million) than the peer average (\$1.3 million) on recycling programs. Furthermore, although the District increased the tons recycled and reduced program expenditures in 2006, the District's program expenditures per ton recycled (\$7.01) are still higher than two peers and the peer average (\$5.16). The higher program expenditures may be due, in part, to differences in programs. See **R4.1** in the **programs and contracts** section for further discussion.

- **Personnel/Overhead Costs:** The District's higher personnel costs are due to employing more staff per capita and recycling lower tonnage per staff even when considering 2006 data for Mahoning County. This contributes to higher personnel and office support costs per ton of recycled waste. See **R3.1** within the **human resources** section for further discussion.
- **Transfers:** **Table 2-2** shows that the District's transfers to the health and engineering (road maintenance) departments exceeded the peer averages (see **R2.2**). In particular, **Table 2-2** shows that the District transferred \$415,000 for road maintenance in 2006 while none of the peers made this transfer. If the road maintenance transfers were excluded from consideration, the District's total expenditures per ton recycled would have been in \$39.96 in 2005 and \$12.92 in 2006, both of which are still higher than the peer average (\$8.41).

Assessments Not Yielding Recommendations

In addition to the analyses presented in this report, an assessment was conducted in the following area in the financial systems section which did not warrant changes and did not yield recommendations.

- **Stakeholder Participation:** The District regularly uses volunteer groups to promote litter prevention and recycling. These groups include college sororities, the Boy Scouts of America, church groups, National Honor Society groups, and neighborhood block groups. The District has also organized a group of about 450 community members who are involved in cleanup work at Mill Creek Park. In addition, the District operates an Adopt-a-Spot Program, which encompasses cleaning a larger area of land and requires a more lengthy time commitment than the above-mentioned groups. A representative from the Ohio EPA indicated that the District's practices for using volunteers are generally consistent with the other solid waste management districts in the State.

Noteworthy Accomplishments

The following are noteworthy accomplishments identified during the course of the performance audit of the District's financial systems:

- **Budgetary Process:** The County Commissioners and the Mahoning County SWMD have an effective process in place for developing, supporting and explaining the annual budget. For example, the District prepares a formal budget document that outlines key issues such as the District's mission statement, organizational structure and staffing levels, goals and objectives for the upcoming year, performance measures, historical and projected revenues and expenditures, and summary explanations of issues that may affect the District in the upcoming year, including the availability of grants, and community support

of expanded programs and services. The District also has procedures in place to obtain stakeholder input regarding the proposed budget. Specifically, the District has established a Policy Committee that includes the Mayor of Youngstown, one of the County Commissioners, the Health Commissioner, a township representative, and three citizens. The Committee meets monthly and makes suggestions to the District regarding the progress in achieving the goals and objectives outlined in the comprehensive plan. The Policy Committee also has input into the priorities outlined in the District's budget proposal. The District's budget document and process are consistent with GFOA's recommended practices.

- **Long-Term Planning:** All solid waste management districts in Ohio are required to develop a comprehensive solid waste management plan that identifies the district's long-term goals, objectives and strategies for ensuring that residents have access to adequate solid waste disposal capacity. Specifically, ORC Section 3734.53 states that "the solid waste management plan of any county or joint solid waste management district shall be prepared in a format prescribed by the Director of Environmental Protection and shall provide for compliance with the objectives of the State's solid waste management plan." The legislation goes on to state that "the plan shall provide for, demonstrate, and certify the availability of, and access to, sufficient solid waste management facility capacity to meet the needs of the district for the ten-year period covered by the plan."

The District's comprehensive solid waste management plan projects for a 15-year period and contains estimates of the remaining useful life of each of the landfills, long-term strategies for reducing future reliance on these landfills, input from members of the community, and clearly defined goals and benchmarks for measuring success. The plan also indicates that the District will have sufficient landfill space to meet its needs throughout the planning period (15 years). A representative of the Ohio EPA indicated that they were unaware of any non-compliance issues facing the District and credits District management for developing a quality comprehensive solid waste management plan. The EPA representative also indicated the Ohio EPA officially approved the District's solid waste management plan in March 2007, which signifies that the District's format complied with Ohio EPA requirements.

- **Local Business/School Relationships:** The District has developed a collaborative relationship with the Youngstown State University (YSU), the public schools within Mahoning County, and other area businesses to promote recycling. The District works with YSU to promote recycling by establishing and maintaining aluminum can and paper recycling bins at every building on campus, establishing a program whereby unwanted furniture is donated to area organizations rather than being disposed, and installing an in-vessel composting system that allows YSU to compost food waste. According to YSU, it is estimated that the food composting program could lead to the recycling of 20,000-30,000 additional tons of waste each year. Additionally, in 2005, the District had 160

businesses committed to implementing recycling programs to collect paper, bottles and cans at no charge to the business. The Assistant Director indicated that the District intends to add at least fifty new businesses to this program annually. Lastly, the Assistant Director indicated that paper recycling is provided at most public schools, and bottles and cans are collected from approximately 15 percent of public schools. Based on peer comparisons, the District appears to be more proactive in establishing relationships with area businesses and organizations. Further, a representative from the Ohio EPA indicated that the Mahoning County SWMD and the YSU are pioneers in the area of food composting and are doing much more to promote recycling than other universities in the State.

Recommendations

Revenue Management

R2.1 The District should review its internal control structure for monitoring the amounts being disposed in the landfills. In particular, Mahoning County SWMD should consider negotiating with the landfill operators to install video surveillance equipment that can be used to monitor the weight measurement process, and to allow District staff to perform a landfill oversight function. These employees could be responsible for visiting each landfill on a daily basis and monitoring a sample of the weight measurement transactions for accuracy, ensuring that the surveillance equipment is working properly, and working with and overseeing the Health Department Monitors' review of the materials being disposed in the landfill. One potential option to facilitate this would be to reallocate the excess staff from the recycling programs/education function (see R3.1 in the human resources section) to landfill oversight.

Once the District has taken the above measures, it should annually review its landfill oversight staffing levels and contracted Health Department services to various performance measures, such as tons disposed per FTE, transactions sampled per FTE, and tipping fees per FTE. This will help the District determine when staffing adjustments are needed based on Health Department services and changing conditions at the landfills.

The District received approximately 97 percent of its revenues from disposal fees (tipping fees) in 2005. Despite the importance of tipping fees, the District lacks strong internal controls over the tipping fee reporting process. Under the current process, trucks disposing waste in the landfills are weighed before and after they dump the waste. The weights, as well as the type of material, county of origin, etc., are recorded on slips that are collected daily by an employee of the landfill. The information from these slips is compiled and sent to the Director of the Mahoning County SWMD on a monthly basis along with a check that represents the total tipping fees for the month. Monitors from the Health Department visit the three landfills a few times each week to verify that the trucks are properly recording the type and origin of the waste. However, the Health Department does not monitor each weighing transaction. Furthermore, the District does not use surveillance cameras to monitor activity at the weight scales. Typically, the Director reviews tipping fee reports and weight slips for identifiable variances, and the Assistant Director and Waste Specialist perform an additional review of the tipping fee reports.

As indicated by the description above, the District primarily relies on the landfill operators to accurately self-report and remit the appropriate tipping fees. This has caused

the District some problems in the past. For example, the District is currently working with the Health Department and the Sheriff's office to conduct an investigation into suspected areas of fraudulent reporting by certain waste haulers. The Lake County SWMD has four on-site employees (3.3 FTEs) that are responsible for ensuring the accuracy of the tipping fees by monitoring the weight measurement process and verifying the material being disposed. The Lake County SWMD also uses video surveillance on the scales to prevent tampering and abuse. Video surveillance provides the Lake County SWMD with evidence that could be used to prosecute violators. It should be noted that Lake County owns the landfill where the surveillance equipment is installed and the employees monitor the weighing transactions. By comparison, all three landfills in Mahoning County are privately owned. However, according to a representative from the Ohio EPA, there are no legal requirements that would preclude Mahoning County SWMD from negotiating with the landfill owners to install surveillance equipment or have District employees monitor a sample of weighing transactions. In 2005, the Lake County SWMD had 279,409 tons of waste disposed in the landfill, which equates to 84,669 tons per landfill monitor FTE.

R3.1 in the **human resources** section indicates that the District employs approximately 2.5 more FTEs when compared to the peer average, based on the tons of material recycled at Mahoning SWMD in 2006. If the District reallocated these positions to landfill oversight duties similar to the Lake County SWMD, the employees would be responsible for 139,826 tons of waste disposed per FTE, based on the disposal rates in 2005. Although the reallocation of 2.5 FTEs would result in lower staffing for landfill oversight in comparison to the Lake County SWMD, this staffing level appears appropriate considering the District's expanded use of the Health Department. **Table 2-2** shows that the District transferred approximately \$456,000 to the Health Department in 2005, while the Lake County SWMD only transferred approximately \$118,000. This results in the District transferring significantly more revenue to the Health Department on a per capita, per ton recycled, and per ton disposed basis (see **R2.2, Table 2-3**). These disparities are due to the District using the Health Department to provide some landfill oversight services in addition to testing for health code violations. By comparison, the Lake County SWMD primarily uses the Lake County Health Department to provide testing services and relies on its employees for landfill oversight.

During the course of this performance audit, AOS held periodic status meetings with the Director and Assistant Director at Mahoning County SWMD to allow for early implementation of certain recommendations. Based on these discussions, the District worked with the Mahoning County Prosecutor's Office in an effort to negotiate a voluntary oversight program with the landfill operators. However, the landfill operators objected to the initial proposals set forth by the District. The District is encouraged to continue pursuing negotiations with the landfill operators in an effort to allow for some oversight function.

Financial Implication: According to a vendor, the installation of a camera at each of the three District landfills would result in an initial expenditure of \$2,400 and an annual cost of \$240 for an extended maintenance warranty once the initial one-year warranty expires.

R2.2 The District should consider requiring the Board of Health and the Engineering Department to submit invoices for actual services rendered (similar to a contracted service), rather than making annual transfers prior to the work taking place. The invoice should list all relevant details such as the name of the person who provided the service, a description of the service, start and end times, the billing rate by component (salary, benefits, supplies, materials, etc.), and any overhead costs. This would promote accountability and better ensure that the District complies with ORC section 3734.57. In addition, the District should consider negotiating annual contracts with the Board of Health instead of entering into fixed contracts for a three-year time period. This would provide the District with more flexibility to adjust the reimbursement/billing rate as conditions change.

ORC section 3734.57 indicates that solid waste management districts can provide financial assistance to the boards of health within the district to defray the costs of enforcing health code regulations associated with solid waste operations. ORC section 3734.57 also indicates that solid waste management districts can provide financial assistance to defray the cost of maintaining roads resulting from the location and operation of a solid waste facility within the county. **Table 2-3** compares the District's transfers by department to the peers.

Table 2-3: Transfers by Department

	Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005	Peer Average
Health Department	\$455,624	\$455,624	\$67,167	\$117,879	\$262,277	\$149,108
Per Citizen	\$1.80	\$1.80	\$0.47	\$0.51	\$0.48	\$0.49
Per Ton Recycled	\$5.38	\$2.25	\$0.55	\$1.18	\$0.88	\$0.87
Per Ton Disposed	\$1.30	\$1.30	\$0.62	\$0.42	\$0.49	\$0.51
Engineering Dept.	\$250,000	\$415,000	\$0	\$0	\$0	\$0
Per Citizen	\$0.99	\$1.64	\$0	\$0	\$0	\$0
Per Ton Recycled	\$2.95	\$2.05	\$0	\$0	\$0	\$0
Per Ton Disposed	\$0.72	\$1.19	\$0	\$0	\$0	\$0

Source: Ohio EPA and Mahoning SWMD

Note: The District's 2005 tonnage disposed was used in both years as 2006 data was not available during the audit. Due to timing issues, the 2006 information represents figures provided by the Mahoning County SWMD. These figures did not go through the Ohio EPA review procedures.

Table 2-3 shows that District transfers to the Health Department exceeded the peer averages on a per citizen, per ton recycled, and per ton disposed basis. The District negotiates the amounts to be transferred to the Health Department through a host agreement that includes the Mahoning County Board of Health, the District Policy

Committee and the Mahoning County Commissioners. The agreement lists specific requirements for the Health Department to complete in testing the landfills for health and safety issues. Under the current agreement, the District is required to transfer \$455,624 to the Health Department in 2005 and 2006. This amount increases to \$463,376 in 2007, which is the last year of the contract. The contract also indicates that the Board of Health will provide detailed information concerning the cost of the inspections to the District on a quarterly basis. The Assistant Director indicated that the District is receiving these reports as required by the contract. However, although the reports indicate the number of activities that are performed at each landfill and include a gross billing rate to cover Health Department costs, the reports do not specify which activities were performed or when they were performed. Additionally, the reports do not indicate the specific variables that were considered when determining the billing rate for each landfill.

In contrast to the District, the Summit/Akron SMWA negotiates the health department transfers on an annual basis. According to the Director of the Summit/Akron SWMA, this allows for more flexibility and accountability as adjustments can be made if fewer inspections and testing are needed in a particular year.

Table 2-3 also shows that the District transferred \$250,000 in 2005 and \$415,000 in 2006 to the Engineering Department for road maintenance. In addition, the District's transfer for road maintenance is budgeted to increase to \$500,000 in 2007. Although **Table 2-3** shows that none of the peers made road maintenance transfers in 2005, the Director of the Lake County SWMD indicated there was a reporting error in the forms submitted to the Ohio EPA and that the Lake County SWMD transfers \$0.25 per ton (\$53,317 in 2005) to Painesville Township for road maintenance.

According to the Assistant Director at the Mahoning County SWMD, the required road maintenance transfer is determined annually by the County Commissioners. However, the transfer amounts are not linked to actual service levels or road maintenance costs. In addition, the Engineering Department does not submit invoices or detailed reports that provide relevant information, such as project descriptions, labor costs, and supply and material costs for projects funded with the District's revenues. This lack of detail would make it difficult for the District to demonstrate that the transfer was used for a purpose consistent with ORC section 3734.57. Lastly, **Table 4-1** in the **programs and contract management** section shows that recycling programs comprised 46 percent of total expenditures in 2005, but declined to 39 percent in 2006. This decline is partially due to the large increase in road maintenance transfers. The Assistant Director indicated that the large increases in road maintenance transfers are due to the County Commissioners wanting to make significant repairs to the haul roads in the District.

R2.3 In addition to applying for Federal and State grants, the District should consider actively researching and applying for local grants that are offered by foundations

and businesses. Although these grants may be smaller and more difficult to obtain, they can provide the District with additional funding that can be used to supplement the current recycling programs. Obtaining local grants can become more important in the future if Federal and State programs restrict grant funding.

The District did not list grants as a revenue source on the Ohio EPA reports. According to a representative from the Ohio EPA, solid waste management districts are not required to include grants as a revenue source in the quarterly report filings. However, the Assistant Director indicated that the District received grant revenue totaling \$78,480 (\$0.31 per citizen) in 2005 from an Ohio Department of Natural Resources (ODNR) Community Recycling and Litter Prevention Grant. By comparison, Clark, Lake and Summit/Akron's grant revenue per citizen in 2005 was \$0.62, \$0.62, and \$0.44, respectively. The District's grant revenue increased to \$322,500 (\$1.28 per citizen) in 2006, which is higher than each of the peers. The significant increase is due primarily to an ODNR Market Development Grant, which will allow a private entity to construct a material recovery facility that will sort recycled fiber, plastic, glass, and aluminum products.

The Director of the Mahoning County SWMD is responsible for researching and applying for grants while the financial reporting is handled by the Assistant Director. The Director indicated that he regularly attends grant writing training programs offered by the ODNR. However, the Assistant Director indicated that it is difficult to find local or private grants that are consistent with the District's mission. As a result, Federal and State grants are the District's main source of grant funding. A representative of the ODNR indicated that State sponsored grants are becoming increasingly difficult to obtain. For example, prior to 2006, grant awards were primarily based on population and were much easier for solid waste management districts to receive and renew. However, after 2006, all grants are based on applications and proposed results, with no guarantees as to the amount of future grant funding. This makes it especially important that solid waste management districts actively monitor their grants program. The ODNR representative also indicated that the Mahoning County SWMD is aggressive about seeking ODNR grants, and that the District has not had any instances of grant non-compliance in the past.

The Director of the Clark County SWMD indicated that they actively seek local and private grants as an alternative source of funding. The Director of the Clark County SWMD also indicated that she regularly attends workshops which identify strategies for writing and locating grants. This has resulted in the District receiving several grants from local businesses and area foundations.

Management and External Reporting

R2.4 The District should work with the County Administrator and the County Commissioners to determine which reports should be prepared, submitted, and discussed on a regular basis (monthly, quarterly, annually). In particular, the District should consider providing budgetary and service/activity level summaries on a monthly basis. This would allow for more timely and informed decision-making.

The District provides the County Commissioners with information on a weekly basis through a status report that is sent by the Director. This report summarizes the Director's solid waste management activities for the week. For example, past status reports have included staffing decisions, District management of recycling programs, and upcoming third-party vendor contracts that need to be approved by the County Commissioners. The District also provides the County Commissioners with budgetary reports on a bi-monthly basis that show the District's original budget, amounts expended/encumbered, and budget amount remaining. However, the District does not provide the County Commissioners with regular reports demonstrating the District's service and activity levels. For example, the County Commissioners are not provided with reports showing the District's tipping fee receipts, tons of waste disposed in landfills, tons recycled, or the year-to-date recycling rates by type. The Assistant Director indicated that the District monitors each of these performance measures and updates the County Commissioners on any significant variances during the weekly status updates. The Director also stated that the County Commissioners' primary focus is on the bottom line revenue receipts and recycling rates in comparison to the goals and that upon request, the County Commissioners have access to any information pertaining to the District since it is under their jurisdiction.

The Director at the Lake County SWMD indicated that reports with budgetary and service information are provided to the County Commissioners on a monthly basis. In addition, GFOA indicates that evaluating and reporting on program performance on a routine, publicized basis keeps stakeholders apprised of actual results compared to expectations.

R2.5 The District should re-design its website to include more information regarding the budget, programs, activities, and service levels. The District should also design a kid's web page that includes online games, educational activities and other downloadable materials that would help educate children and parents about the importance of recycling. By improving the website, the District would be using an easy and inexpensive method to promote its programs and educational activities. This, in turn, could increase its recycling rate.

The District uses a variety of methods to communicate solid waste management information to stakeholders. For example, it regularly gives presentations to senior citizen groups, school children, and other organizations on the importance of recycling. The District received the Community Involvement Gold Achievement Award from the Ohio Environmental Protection Agency for giving 750 of these presentations in 2006. In addition, the District partners with the Mahoning County Soil and Water Conservation District to mail quarterly newsletters to approximately 100,000 households. It also provides some of the content for the newsletters while the Mahoning County Soil and Water Conservation District is responsible for typesetting, printing and mailing them. The District pays the Mahoning County Soil and Water Conservation District approximately \$10,000 annually for this service. Past newsletters have included information on upcoming special events, such as Christmas tree and electronic device recycling as well as various recycling statistics.

The District uses its website as another tool to educate the community on its operations. The website is updated weekly and includes information such as a listing of programs available to citizens, listings for special events such as household electronics collections, the District's solid waste management plan, and information for area businesses wishing to enroll in the various recycling and re-use programs offered by the District. However, the website does not include copies of past newsletters, specific statistics regarding recycling and tonnage disposal rates, budgetary information, or educational activities for children and their parents. The Director indicated that the District informs the public of actual performance through various media outlets, such as radio interviews and press releases.

The Cuyahoga County Solid Waste Management District includes a wide variety of statistics, recycling information and downloadable publications on its website, such as residential recycling statistical reports, annual summary reports, solid waste plan summaries, and classroom materials for teachers. The Cuyahoga County Solid Waste Management District also includes a kid's page on the website that consists of educational games that can be played online, contests, books and other materials designed to creatively inform kids and their parents about the importance of recycling. In addition, the Summit/Akron SWMA includes various recycling statistics, reports and a kid's page on its website.

R2.6 The District should use surveys as another method for obtaining input from citizens and relevant stakeholders. Doing so would ensure that the District considers a broad range of input from a variety of sources to help identify operational and programmatic improvements.

Although the District uses a variety of methods (educational presentations, website, and newsletter) to inform the public of its operations, it does not have a formal or regular method for obtaining feedback from citizens. For example, the District does not regularly use citizen surveys as a way to measure satisfaction with programs and services. Conversely, the Lake County SWMD used surveys in 2005 to gauge public satisfaction with the curbside recycling program. The Director of the Lake County SWMD indicated that these surveys were valuable as they provided many useful suggestions. According to GFOA, a government should develop mechanisms to identify stakeholder concerns, priorities and needs. GFOA also indicates that surveys are one mechanism that should be considered in promoting stakeholder participation.

An online survey tool could help the District easily administer and compile a resident survey. For example, one provider advertises that an entity can sponsor an unlimited number of surveys, with an unlimited number of pages and questions, for \$19.95 per month or \$200 per year. The District could inform citizens of an online survey via various methods, such as existing web sites; quarterly newsletters; and e-mails/postcards to area businesses, local officials, and residents.

Financial Implications Summary

The following table summarizes the estimated one-time and annual costs for recommendations in this section of the report. For the purpose of this table, only recommendations with quantifiable impacts are listed.

Summary of Financial Implications

	Estimated One Time Cost	Estimated Annual Cost
R2.3 Purchase one camera for each of the three District landfills	\$2,400	\$240
Total Costs	\$2,400	\$240

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Human Resources

Background

This section of the performance audit focuses on the Mahoning County Solid Waste Management District's (Mahoning County SWMD or the District) human resource functions. The objectives are to assess staffing levels, salaries, healthcare benefits, and employment issues. To illustrate various operational issues, comparisons are made to peer solid waste management districts and other applicable sources, such as the State Employment Relations Board (SERB) and the Kaiser Foundation. The peers used in this performance audit are the Clark County Solid Waste Management District (Clark County SWMD), the Lake County Solid Waste Management District (Lake County SWMD) and the Summit/Akron Solid Waste Management Authority (Summit/Akron SWMA).

Organizational Structure

The Mahoning County SWMD's human resource functions are primarily completed by the Mahoning County Human Resources Department (Human Resources Department), and include benefits administration, personnel record maintenance, collective bargaining negotiations, and workers' compensation management. However, the Director and Assistant Director of the Mahoning County SWMD also have certain human resource duties which include making recommendations to the County Commissioners for hiring and terminating employees, and evaluating employee performance.

The Mahoning County SWMD is under the authority of the County Commissioners. The Director (1.0 full-time equivalent (FTE)) reports to the County Commissioners and is responsible for developing and coordinating implementation of the District's Comprehensive Solid Waste Management Plan. The Director is also responsible for creating the budget, ensuring effective communication throughout the District, and supervising the Assistant Director and other District employees. The following describes key duties performed by the other staff members at the District:

- **Assistant Director (1.0 FTE):** Supervises all staff members at the District, reviews fiscal and purchasing activities, and serves as the District's public awareness/marketing coordinator.

- **Waste Statistics/Specialist (1.0 FTE):** Collects and processes District statistics and provides support for computer equipment. This person also prepares all Ohio EPA quarterly and annual reports, and serves as the liaison for the Sheriff’s recycling/litter contract.
- **Division Coordinator Commercial Industrial Specialist (1.0 FTE):** Conducts commercial and industrial solid waste assessments to improve recycling efforts, coordinates recyclable collection activity, and works with outside entities to complete surveys and reports.
- **Environmental Educator (2.0 FTEs):** Develops educational programs which are presented to schools, libraries, special waste contractors and other organizations.
- **Field Operator/Special Projects Operations (1.0 FTE):** Collects, places, rotates, and maintains recycling drop-off bins.
- **Business Manager (1.0 FTE):** Maintains financial records and processes District invoices.
- **Executive Secretary (0.0 FTE):** Although currently vacant, this position prepares reports and memos, and answers the telephone.
- **Receptionist (1.0 FTE):** Assists visitors, answers the telephone, and provides clerical support to District staff.
- **Battery Sorter (0.4 FTE):** Sorts batteries that are collected from drop-off sites.
- **Intern (0.2 FTE):** Conducts research in response to requests from staff and citizens, assists in the creation of presentations, and supports inventory documentation.
- **Collection Route Employee (0.5 FTE):** Collects recyclable materials from governmental entities.

Employment Policies and Compensation

Table 3-1 presents key employment policies for Mahoning County SWMD and the peers.

Table 3-1: Employment Policies

	Mahoning County SWMD	Clark County SWMD	Lake County SWMD	Summit/Akron SWMA
Vacation Accumulation	< 1 year: None 1-7 years: 10 days 8-14 years: 15 days 15-24 years: 20 days 25+: 25 days	< 1 year: None 1-7 years: 10 days 8-14 years: 15 days 15-24 years: 20 days 25+: 25 days	< 1 year: None 1-7 years: 10 days 8-14 years: 15 days 15-24 years: 20 days 25+: 25 days	< 1 year: None 1-4 years: 10 days 5-9 years: 15 days 10-19 years: 20 days 20+: 25 days
Holidays	11 days	10 days	10 days	12 days
Personal Leave	2 days, based on: 4 hrs of leave for each calendar quarter in which less than 24 hours of sick leave is used.	3 Days, based on: Employees can convert 3 days out of 15 sick days to personal leave every January 1.	4 days Use is subtracted from sick leave and employee must have at least 120 hours in reserve.	3 days Use is subtracted from sick leave
Annual Sick Leave Accrual	120 hours	120 hours	120 hours	120 hours
Maximum Sick Days Accrued	Unlimited	Unlimited	Unlimited	Not specified
Documentation of Sick Leave	Must supply a doctor's note after 3 consecutive days of sick leave are used.	Must supply a doctor's note after 3 consecutive days of sick leave are used.	Employee must complete and sign an Absentee Report form upon the use of paid or unpaid sick leave.	If an employee uses sick leave for a prolonged illness or injury requiring medical care, a physician's statement may be requested
Sick Leave Paid at Retirement	Not to exceed 240 hours.	30 days (240 hours), if 960 hours of sick leave have been accumulated	Varies based on years of service. The maximum of 960 hours can be achieved after 35 years of service. ¹	Not specified
Days to File a Grievance	10 days	5 days	10 days	10 days
Probationary Period	120 days	120 days	120 days	90 days ²
Negotiated Wage Increase	1.5% -2006 1.5% - 2007	3.0% -2006 2.0% - 2007	3% - 2006 3% - 2007	2% - 2006 2.25% - 2007
Employee Contribution to Retirement System	Employer pays employee's required retirement contribution	Employee pays the employee contribution	Employee pays the employee contribution	Employee pays the employee contribution

Source: County Contracts and Policies and Procedures Manual

Note: Mahoning County is the only solid waste district presented in **Table 3-1** with employees that belong to a union.

¹ This provision is for employees employed on, or after, January 1, 1997.

² The Summit/Akron SWMA Policy Handbook refers to this provision as an "Orientation Period."

Table 3-1 illustrates that with the exception of the additional pension benefit the Mahoning County SWMD's employees receive, the District's employment provisions are comparable to the peers.

Table 3-2 shows the average 2006 salary levels for the Mahoning County SWMD and peer solid waste districts. The District's salaries shown in **Table 3-2** have been adjusted to reflect the additional pension benefit (9.0 percent) received by the employees.

Table 3-2: Salary Comparison

Classification	Mahoning County SWMD ¹	Clark County SWMD	Lake County SWMD ²	Summit/Akron SWMA	Peer Average
Administrative Salaries	\$50,140	\$56,139	\$65,776	\$84,897	\$68,937
Operations Salaries	\$33,020	\$34,656	\$43,923	\$35,172	\$37,917
Support Salaries	\$38,406	\$29,469	\$38,383	\$47,985 ³	\$38,613
Average Total Salaries	\$37,583	\$37,552	\$48,105	\$41,988	\$43,894

Source: MCSWMD and peer documents

¹ These salaries include a 9.0 percent employee retirement contribution which is paid by the County.

² The salaries reported by the Lake County SWMD are from 2007. However, for purposes of this analysis, the three percent COLA awarded in 2007 was subtracted from each salary to estimate the 2006 salaries.

³ Summit/Akron SWMA has a contract with an accounting firm to provide a staff person to handle bookkeeping functions. This staff member equates to 0.3 FTE. Summit County pays \$55.00 an hour to employ this person.

Table 3-2 illustrates that despite employees receiving the additional pension benefit, Mahoning County SWMD's salaries are lower than the peer average in the administrative and operations classifications, but are comparable in the support function. The lower administrative salaries are due to the District including an Assistant Director position within the administrative classification at an annual salary of approximately \$40,000 (includes pension benefit) while none of the peers have this position. The Director makes approximately \$60,000 annually (includes pension benefit), which is comparable to the peers. The District's lower salaries for operations employees are due to the two part-time positions within this classification. If these positions are removed from consideration, the District's average operations salaries are \$36,016. This is slightly higher than the Clark County SWMD and the Summit/Akron SWMA, but comparable to the peer average.

Assessments Not Yielding Recommendations

Based on the analyses in **Table 3-1** and **Table 3-2**, the review of District employment policies and compensation levels did not yield any recommendations.

Recommendations

Staffing

- R3.1 Under the current circumstances, the District should not hire any additional staff. To ensure appropriate staffing levels in the future, the District should regularly monitor the recycling rates as they relate to staffing assignments. By taking measures to increase its recycling rates (see the programs and contract management section), the District would be able to improve staffing efficiency to be more comparable to the peers. However, if recycling rates do not improve, the District should review its staffing assignments and consider eliminating 2.5 FTEs or reallocating excess staff to provide landfill oversight (see R2.1 in financial systems). If the District's recycling rates improve, it may be necessary to hire additional staff in order to provide the landfill oversight identified in R2.1 of the financial systems section. However, the financial impact associated with hiring staff under this scenario is difficult to quantify because the number of staff and the impact of improved oversight on the tipping fees is not known.**

Table 3-3 shows the FTE staffing levels for the Mahoning County SWMD and the peers as of December 31, 2006. The data used for the workload analysis was obtained from the Ohio EPA 2005 Annual District Reports. The staffing assignments for the Lake County SWMD are not shown in **Table 3-3** because the majority of their support employees are responsible for landfill oversight. The Lake County SWMD contracts with a third party vendor to complete its recycling and educational activities. In contrast, the Mahoning County SWMD, the Clark County SWMD and the Summit/Akron SWMA all use their own employees for recycling/educational programs and do not have any employees for landfill oversight.

Table 3-3: In-House Staffing Comparison

Classification	Mahoning County SWMD - 2005	Mahoning County SWMD - 2006	Clark County SWMD	Summit/Akron SWMD	Peer Average
Administrative FTEs	2.0	2.0	1.0	1.0	1.0
Operations FTEs	5.9	5.9	2.0	3.8	2.9
Support FTEs	2.2	2.2	1.6	1.3	1.5
Total FTEs	10.1²	10.1²	4.6	6.1	5.4
Total Personnel Costs	\$663,582	\$562,648	\$227,518	\$414,654	321,086
Total Estimated County Population	252,660	252,660	144,130	547,314	306,816
FTEs Per 100,000 Population	4.0	4.0	3.2	1.1	2.2
2005 Total Tons of Waste Recycled ¹	84,683	202,346	122,876	299,508	211,192
2005 Total Tons of Waste Recycled Per SWMD Staff FTE	8,384	20,034	26,712	49,100	37,906
Total Personnel Costs Per Ton of Waste Recycled	\$7.83	\$2.78	\$1.85	\$1.39	\$1.62

Source: AOS Interviews and Ohio EPA Report

Note: The personnel costs, population, and tons of waste recycled shown in Table 3-3 was obtained from the Ohio EPA, while the FTE information was provided by the respective entity. AOS ensured data reliability by discussing significant variances with management at Mahoning County SWMD and the peer organizations, and presenting data in a uniform fashion to ensure valid comparisons. See page 2-2 and Tables 2-1 and 2-2 in financial systems for more information. AOS also confirmed with the peers that the recycling operations in 2005 did not vary significantly in 2006.

¹ The amount recycled includes the following categories: residential/commercial, industrial, and exempt collections.

² The FTE counts for Mahoning County SWMD represents staffing levels as of February, 2007.

Table 3-3 shows that the District's staffing levels are higher than the peer average by 1.8 FTEs on a per 100,000 population basis. In addition, the District's staff was only responsible for an average of 8,384 tons of waste recycled per FTE in 2005, which was significantly lower than the peer average was 37,906. As a result, the District's personnel cost per ton of waste recycled (\$7.83) was significantly higher than the peer average (\$1.62). However, the District significantly increased the tons of waste recycled in 2006 while reducing operating expenditures. For example, the District estimates that the tons of waste recycled improved to 202,346 in 2006 while the personnel costs declined to \$562,648. The Director attributed the increase in tons recycled to an increase in the number of drop-off centers throughout Mahoning County (24 in 2005, 35 in 2006) and improved procedures for reporting scrap metal collections within the City of Youngstown. The Director attributed the decline in operating expenditures to the July 31, 2006 retirements of the office manager and operations secretary. The office manager was not replaced and a temporary employee is currently performing secretarial duties.

When the staffing levels presented in **Table 3-3** are adjusted for the revised recycling rate in 2006, the District's tons recycled per FTE is 20,034, which is still significantly lower than the peer average (37,906). Similarly, the District's revised expenditure per ton recycled is \$2.78, which is still approximately 72 percent higher than the peer average (\$1.62). The District would need to either increase the tons recycled in 2006 by approximately 67,000 tons or reduce the staffing levels by 2.5 FTEs in order to achieve Clark County SWMD's (the next closest peer) tons recycled per FTE of 26,712.

The differences in staffing levels and assignments between the District and the peers can be attributed to the following:

- **Administrative:** The District has a full-time Director and Assistant Director. In contrast, the Clark County SWMD and Summit/Akron SWMA only have one full-time Director and do not employ an Assistant Director.
- **Operations:** The District has two environmental educators who promote recycling by distributing information (brochures, pamphlets, etc), and conducting workshops, training seminars, and presentations to various organizations. The District also has one commercial industrial specialist that is responsible for conducting solid waste assessments and coordinating recyclable collections with commercial and industrial organizations; one waste specialist that is responsible for collecting and processing statistics and handling all technical support inquiries; one field operator that is responsible for coordinating paper recyclable collections with commercial and industrial organizations; and two part-time employees that are responsible for sorting batteries and collecting recyclable materials from various sites. In contrast, the peers do not allocate their operational employees by areas of specialty. For example, Clark County SWMD's two FTEs are responsible for maintaining an education program, updating the website, providing technical support to staff, and processing their own statistical reports. Summit/Akron SWMA's 3.8 operations FTEs are responsible for planning, management, and coordination of all recycling and waste reduction programs, and development of educational programs for area school districts.
- **Support:** The District has a full-time business manager, an administrative secretary, and a part-time intern within the support category. The Business Manager is responsible for maintaining District financial records and processing invoices. In contrast, Clark County SWMD employs one full-time secretary, a part-time bookkeeper (0.5 FTEs) and an intern (0.1 FTEs). Summit/Akron SWMA employs one full-time secretary and uses an accounting firm to provide a part-time staff person to complete bookkeeping functions. In addition, the District is seeking permission from the County Commissioners to fill a vacant executive

secretarial position. **Table 3-3** shows that if this position is filled, the District will employ twice as many support staff FTEs as the peers.

In short, the peers have been able to create positions which encompass duties performed by several District employees. As a result, the peers are able to use fewer staff and incur lower personnel costs.

Healthcare Benefits

R3.2 Prior to renewing the contract with the current health care provider, Mahoning County (the County) should review the design of its health care plans to determine if cost savings can be achieved by addressing the more generous provisions. Specifically, the County should consider increasing employee co-pays for physician visits and prescription coverage; and requiring employee annual deductibles, cost sharing for hospital visits, and annual out-of-pocket maximums. By reviewing and altering health plan benefits, Mahoning County may be able to reduce its premium costs while still providing benefits that are comparable to State and national benchmarks. The County should also review employee contribution levels towards monthly premiums and consider increasing them, particularly if it does not alter the above plan benefits or encounters future financial difficulties.

All Mahoning County SWMD full-time employees who work 32 hours a week or more are eligible for benefits through a PPO plan provided by Medical Mutual. The County's contract with Medical Mutual expires at the end of 2007. **Table 3-4** compares Mahoning County's (the County) monthly premium costs and employee contribution levels to data reported in the State Employment Relations Board's (SERB) *14th Annual Report on the Cost of Health Insurance in Ohio's Public Sector* (2005) and the Kaiser Family Foundation and Educational Trust *Employer Health Benefits* (2006). To account for inflation, the percentage change in premium costs reported by SERB from 2004 to 2005 is used to project SERB premiums for 2006, assuming that premiums will increase by the same percentage from 2005 to 2006.

**Table 3-4: Monthly Health Insurance Premiums
and Employee Contribution Amounts**

	Mahoning County 2006 Premiums	SERB 2005 Report	SERB 2006 Estimated	Kaiser 2006 Annual Survey
Monthly Single Premiums	\$500.00	\$379.73	\$426.06	\$365
Full-Time Monthly Employee Contribution Percentage for Single	10.0%	8.3%	N/A	16%
Monthly Family Premium	\$930.00 Employee +Children \$1,000.00 Employee+Spouse \$1,065.00 Family	\$966.28	\$1,084.17	\$980
Full-Time Monthly Employee Contribution Percentage for Family	10.0% Employee+Children 10.0% Employee+Spouse 10.0% Family	10.4%	N/A	27%
Dental Plan Coverage Average Monthly Premiums	Single: \$24.10 Employee+Children: \$45.00 Employee+Spouse: \$48.20 Family: \$78.80	\$36.24 Single \$69.74 Family	\$37.66 Single \$73.57 Family	N/A
Vision Plan Coverage Average Monthly Premium	Included in healthcare premiums	Single: \$11.74 Family: \$21.31	Single: \$12.85 Family: \$23.01	N/A
Life Insurance Average Annual Cost	\$0.13/\$1,000 of coverage	\$0.1892 per \$1,000 of coverage per employee ¹	N/A	N/A

Source: Mahoning County SWMD, SERB 2005 Annual Report, Kaiser Employer Health Benefits 2006 Annual Survey

Note: SERB reports that although the average premiums reported above are based on rates for medical coverage only, other items such as prescription, dental, optical, and life are included as a part of the medical plan. Because the costs of these additional benefits cannot necessarily be calculated separately, they may be included with the monthly medical premium.

¹ This number is from 2004. A 2005 figure was not available.

Mahoning County provides vision coverage to all employees as part of the healthcare plan. **Table 3-4** shows that although Mahoning County's premiums for single coverage (\$500) are higher than the combined vision and healthcare premiums estimated for SERB (\$439), the County's family premiums (\$1,065) are lower than the combined estimate for SERB (\$1,107). **Table 3-4** also shows that Mahoning County's single and family premiums are both higher than the Kaiser survey benchmarks (\$365 single, \$980 family).

In addition, **Table 3-4** shows that Mahoning County's employee contributions are consistent with SERB benchmarks, but lower than the Kaiser survey. Specifically, Kaiser reported an average employee contribution of 16 and 27 percent across all single and family plans respectively. In particular, Kaiser reported an average employee contribution of 15 and 26 percent for single and family PPO plans, respectively. Within the PPO plans, Kaiser reported an average employee contribution of 6 and 18 percent, respectively, for state and local governments. This results in an average employee contribution of 12 percent. For all state and local government plans, Kaiser reported an

average employee contribution of 9 and 20 percent for single and family plans, respectively. This results in average employee contributions of 14.5 percent.

Table 3-4 further shows that Mahoning County's dental plan premiums are comparable to the SERB averages. Lastly, **Table 3-4** shows that the County pays \$0.13 per \$1,000 for life insurance coverage, which is lower than the 2005 SERB average of \$0.19 per \$1,000 of coverage.

Table 3-5 compares certain features of the County's medical plan to data reported by Kaiser.

Table 3-5: Key Medical Plan Benefits

	Mahoning County Medical Mutual SuperMed Plus/PPO Network	Kaiser PPO Average Single	Kaiser PPO Average Family
Multi-tier drug plan co-payments	Retail Program \$10 Generic \$20 Brand Name Mail Order \$15 Generic \$15 Brand Name ¹	\$11 Generic \$24 Preferred \$38 Non-preferred	
Average Cost Sharing for Hospital Visits ²	Network: 0% Non-network: 20%	Average Hospital Deductible/Co-pay <ul style="list-style-type: none"> All plans: \$231 PPO: \$238 Average Hospital Co-insurance - PPO: 17% Average Hospital Per Diem: \$170	
Employee Annual Deductible	None	\$473 Single	\$1,034 Family
Employee Out of Pocket Maximum	Network: None Non-network: Single \$1,500 Family \$3,000	21%=No Limit 10%=\$999 or less 22%=\$1,000-\$1,499 23%=\$1,500-\$1,999 20%=\$2,000-\$2,499 8%=\$2,500-\$2,599 18%=\$3,000 or more	22%=No limit 14%=\$1,999 or less 16%=\$2,000-\$2,999 25%=\$3,000-\$3,999 18%=\$4,000-\$4,999 10%=5,000-\$5,999 18%=\$6,000 or more
Office Visit Co-Pay	\$10 Co-Pay, then 100% coverage	<1%: \$5.00 per visit 12%: \$10.00 per visit 25%: \$15.00 per visit 35%: \$20.00 per visit 17%: \$25.00 per visit 7%: \$30.00 per visit 3%: Other Amount	

Source: Mahoning County Schedule of Benefits, Kaiser Employer Health Benefits 2006 Annual Survey

¹ If the patient requests a brand name drug, they pay the brand name co-payment plus the difference between the brand and generic costs. If there is no generic available, the patient pays the co-payment only.

² Only 3% of covered workers in the Kaiser survey face both a deductible/co-pay and co-insurance for hospital visits; 36 % face only a deductible/co-pay; 10% face only coinsurance; 2% face a charge per day; and 48% have no separate cost sharing for hospital visits.

Table 3-5 indicates that Mahoning County requires lower employee payments for each benefit when compared to the Kaiser survey, which can contribute to the County's higher premium costs in **Table 3-4**. Although the County's mail order employee co-payments for generic prescriptions are higher than Kaiser survey averages, its retail prescription drug co-payments are lower than the Kaiser survey averages (\$11 generic, \$24 brand name). **Table 3-4** also shows that Mahoning County employees do not pay any portion of in-network hospital visits, in contrast to 52 percent of covered workers in the Kaiser survey. Similarly, County employees do not face annual out-of-pocket maximums for network services or any annual deductibles. Furthermore, Mahoning County employees are required to pay \$10 per office visit. The Kaiser survey reports that 87 percent of employees covered under a PPO plan pay more than \$10 per office visit.

Financial Implication: **Table 3-4** shows that the County's single (\$365) and family (\$1,065) premiums are 8.7 and 37.0 percent higher than the respective Kaiser averages. Assuming that altering the plan benefits outlined above would reduce premium costs by five percent for the single and all three family plans, the District would save approximately \$4,800 annually in premium costs.

Financial Implications Summary

The following table summarizes the estimated annual cost savings for recommendations in this section of the report. For the purpose of this table, only recommendations with quantifiable impacts are listed.

Summary of Financial Implications

	Estimated Annual Cost Savings
R3.2 Review the design of health care plans	\$4,800
Total	\$4,800

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Programs and Contract Management

Background

This section of the performance audit focuses on the recycling and educational programs, and contract management within the Mahoning County Solid Waste Management District (Mahoning County SWMD or the District). The objective is to analyze the current recycling and educational programs offered by the District as well as the process used in contracting for services, and to develop recommendations for improvements. To illustrate various operational issues, comparisons are made to peer solid waste management districts and other applicable sources, such as the Ohio Environmental Protection Agency (Ohio EPA). The peers used in this performance audit are the Clark County Solid Waste Management District (Clark County SWMD), the Lake County Solid Waste Management District (Lake County SWMD) and the Summit/Akron Solid Waste Management Authority (Summit/Akron SWMA).

Organization Structure and Function

According to ORC sections 343.01 and 3734.52, the primary responsibility of a solid waste management district is to prepare, ratify, and implement a solid waste management plan to ensure that residents of the county have access to adequate solid waste disposal capacity. The stated goal of the District is to develop an integrated solid waste management system that is implemented in an environmentally sound, technically feasible, cost effective and publicly acceptable manner. The District accomplishes this goal by implementing and promoting a variety of recycling and educational programs. The majority of recycling and educational programs are provided as contracted services. For instance, the District spent a total of \$2,688,520 on contracted services in 2005 and \$2,380,320 in 2006. The District's primary recycling contracts consist of the drop-off bin lease agreements with the communities and townships located throughout Mahoning County, a contract to remove household hazardous waste, and a contract with Youngstown State University for the District's re:CREATE program (reuse and recycling projects).

The District must work through the Mahoning County Purchasing Department (Purchasing Department) when contracting for services related to the recycling and educational programs. Under the current organization structure, the Purchasing Department is responsible for the acquisition of goods and services for all county agencies and departments where the Board of Mahoning County Commissioners (County Commissioners) is the contracting and/or appropriating authority.

Assessments Not Yielding Recommendations

In addition to the analyses in this report, assessments were conducted on areas within this section that did not warrant changes and yield recommendations. These areas include the following:

- **Purchasing Policies:** The Mahoning County purchasing policies help ensure that the District is receiving fair prices for materials, supplies and contracted services, and that vendor decisions are made objectively. For example, Mahoning County's purchasing policies require the District to obtain three written quotes from different vendors for all goods and/or services costing more than \$1,000 but less than \$25,000. For services that cost more than \$1,000, the District must also receive approval from the County Commissioners. By comparison, the Summit/Akron SWMA's purchasing policy requires three price quotes for any supplies, materials, and contracted services that cost more than \$3,000. The Clark County SWMD's purchasing policy requires price quotes for all items costing more than \$2,500.

Mahoning County's purchasing policies require the District to receive competitive bids or proposals for items costing more than \$25,000, which complies with ORC section 307.86. Furthermore, all proposed contracts and supporting documentation are to be submitted to the County Prosecutor's Office for legal review before they are sent to the County Auditor's Office for final approval and certification of fund availability. Lastly, during a review of the District's largest contracted service (represents 21 percent of program costs), the District showed evidence of advertising for requests for proposals, receiving multiple responses within the specified timeframe, publicly reading them, submitting them for legal review, awarding the contract based on objective information, and receiving the necessary approvals from the County Auditor and Commissioners.

- **Contract Monitoring:** The District's process for developing vendor contracts and monitoring vendor performance is consistent with recommended practices from the National State Auditor's Association (NSAA). Based on a review of the District's largest contract (represents 21 percent of program costs), the District structures contracts to define the contract terms, services and performance requirements that are expected of the vendor; methods for evaluating vendor performance; possible contract modifications due to changing conditions; and positive and negative incentives for addressing vendor performance. In addition, once a contract has been established, the District assigns the contract to a District employee to ensure that the vendor is complying with the terms of the agreement. In the case of drop-off bin collections, the District's Waste Stat Specialist is responsible for reconciling the amount reported as dropped-off at the bins (measured by recycling coordinators and District employees) to the amount reported as collected and transferred by the vendor. Significant variances are investigated and resolved before payment is made to the vendor. The District uses similar controls to monitor the other programs.

Recommendations

Recycling Programs

- R4.1** The District should perform an annual cost-benefit analysis of its recycling and educational programs to determine which programs are yielding the best results at the most effective price, and to help identify appropriate program changes. To facilitate the review, the Mahoning County SWMD should begin regularly monitoring each program in relation to cost and the impact on the annual recycling rates. In addition, the District should implement R2.6 (see financial systems) and regularly use surveys to obtain citizen feedback on the effectiveness of specific programs.

Along with cost-benefit analyses and citizen surveys, the District should review peer programs and relevant industry sources to help identify new programs, changes to current programs, and potential elimination of ineffective programs. Doing so could collectively help increase overall recycling rates. Examples of such program changes could include further promoting the pay-as-you-throw program; implementing a recycling center which could also cover collection drives; contracting for additional recycling coordinators at drop-off sites; using the website to provide educational materials and explain the benefits of yard waste recycling to reduce or eliminate the workshops; and implementing community educational programs. Furthermore, the District should consider using the methods identified in the *Recycling Best Practices Manual* (Environmental Planning Consultants, 2007) as low-cost alternatives for advertising recycling programs and educating the public.

Table 4-1 compares Mahoning County SWMD's key recycling statistics and program expenditures on a per citizen and program basis to the peers. The majority of information presented in **Table 4-1** was obtained from the Ohio EPA as data is reported in a consistent fashion for each entity. Because the Ohio EPA is a third-party source, AOS limited data reliability testing to discussing significant variances with management at Mahoning County SWMD and the peer organizations, and comparing the District's financial data to its audited financial statements (see **Table 2-1** and **2-2** notes in **financial systems**). In addition, the conclusions drawn in the ensuing assessment depend on information beyond the data in **Table 4-1**. Therefore, when considered in the context of the conclusions drawn in the ensuing analyses, the data contained herein is considered materially reliable.

Table 4-1: Recycling and Educational Statistics

	Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005	Peer Average
Recycling Rates	15% Residential 30% Industrial	N/A	35% Residential 98% Industrial	28% Residential 85% Industrial	17% Residential 76% Industrial	27% Residential 86% Industrial
Landfill Disposal: Pounds per Person, per Day	5.14 Residential 2.25 Industrial	N/A	4.01 Residential 0.06 Industrial	5.98 Residential 0.53 Industrial	4.49 Residential 0.67 Industrial	4.83 Residential 0.42 Industrial
Number of Citizens	252,660	252,660	144,130	229,004	547,314	306,816
Total Tons Recycled	84,683	202,346 ¹	122,876	222,132	299,508	214,839
% of Population with High School Diploma	83%	83%	81%	86%	86%	84%
% of Population with Bachelors or Higher	18%	18%	15%	22%	25%	21%
RECYCLING PROGRAMS						
Number of Recycling Programs	17	18	11	10	9	10
Expenditures for Recycling Programs	\$1,660,652	\$1,184,650	\$115,755	\$1,673,931	\$1,399,229	\$1,062,972
Expenditures per Program	\$97,685	\$65,814	\$10,523	\$167,393	\$155,470	\$111,129
Expenditures per Citizen	\$6.57	\$4.69	\$0.80	\$7.31	\$2.56	\$3.56
Expenditures per Ton Recycled	\$19.61	\$5.85	\$0.94	\$7.54	\$4.67	\$4.38
Percent of Budget Spent on Recycling	45.8%	39.1%	13.6%	80.7%	52.2%	48.8%
EDUCATIONAL PROGRAMS						
Number of Educational Programs	9	9	11	8	7	9
Expenditures for Educational Programs	\$303,466	\$168,339	\$64,701	\$33,425	\$431,034	\$176,387
Expenditures per Program	\$33,718	\$18,704	\$5,882	\$4,178	\$61,576	\$23,879
Expenditures per Citizen	\$1.20	\$0.67	\$0.45	\$0.15	\$0.79	\$0.46
Expenditures per Ton Recycled	\$3.58	\$0.83	\$0.53	\$0.15	\$1.44	\$0.71
Percent of Budget Spent on Education	8.4%	5.6%	7.6%	1.6%	16.1%	8.4%

Source: Ohio EPA reports and Solid Waste Management Plans for Mahoning and the peers

¹ Due to timing issues, the tons recycled by Mahoning in 2006 represents a figure provided by the Mahoning County SWMD and did not go through the Ohio EPA review procedures

Table 4-1 shows that in 2005, Mahoning County SWMD achieved lower recycling rates than each of the peers despite spending more than the peer average on recycling and educational programs. Specifically, **Table 4-1** shows that the District spent \$6.57 per citizen and \$19.61 per ton recycled for recycling programs, much higher than the peer averages of \$3.56 and \$4.38, respectively. Likewise, the District spent \$1.20 per citizen and \$3.58 per ton recycled for educational programs, considerably higher than the peer averages of \$0.46 and \$0.71, respectively.

Table 4-1 also shows that although the District spends more in total on recycling programs, the District offered more programs (17) and dedicated a smaller percentage of its total budget (46 percent) to recycling programs than the peer averages (10 programs and 49 percent) in 2005. As a result, the District's expenditure per recycling program (\$97,685) was 12 percent lower than the peer average (\$111,129). This indicates that Mahoning County SWMD spreads its resources over more recycling programs, instead of focusing resources on core programs. In contrast, the District offered approximately the same number of educational programs (9) and dedicated a similar percentage of its total budget (8.4 percent) to educational programs in 2005 when compared to the peers (9 programs and 8.4 percent of budget). Due to the higher educational program expenditures, the District's expenditure per educational program (\$33,718) was 42 percent higher than the peer average (\$23,879) in 2005. Lastly, **Table 4-1** shows that the District's landfill disposal rates in pounds per person, per day for both residential (5.14) and industrial waste (2.25) are higher than the peer averages of 4.83 and 0.42, respectively. Collectively, these ratios indicate that the District's recycling programs in 2005 were not effective from a cost and programmatic perspective.

The District was able to significantly increase the number of tons recycled in 2006 while reducing the amount spent on recycling and educational programs. Specifically, the District estimates that the tons of waste recycled increased to 202,346 in 2006 while the recycling program costs declined to approximately \$1.2 million. The Director attributed the increase in tons recycled to an increase in the number of the drop-off centers throughout Mahoning County (24 in 2005, 35 in 2006) and improving the procedures for collecting scrap metal from area businesses. The decline in recycling program expenditures is due primarily to the reduction in recycling market development costs, while the decline in educational program expenditures appears to be due to reductions in the number of educational workshops and public presentations (see **Tables 4-2** and **4-3** in the Appendix).

Table 4-1 shows that despite the lower recycling and educational program costs and the increase in tons recycled in 2006, the District still maintains a higher recycling and educational program cost per citizen and cost per ton recycled in comparison to the respective peer averages. The higher educational costs are due, in part, to the District dedicating 2.0 FTEs to the educational programs. By comparison, Summit/Akron SWMA

employs 1.8 FTEs for educational purposes, Clark County SWMD does not dedicate anyone specifically to this function, and Lake County SWMD outsources this function. (See **R3.1** in the **human resources** section for a further assessment of staffing levels.) In addition, **Table 4-1** shows that the District dedicated a smaller percentage of its budget to recycling and educational programs in 2006, when compared to the respective peer averages in 2005. Along with the reduction in program costs, the lower percentage of the budget dedicated to recycling and educational programs can be partially attributed to the District transferring approximately \$455,000 to the Health Department to monitor the landfills for health purposes and approximately \$415,000 to the Engineering Department for road maintenance (see **R2.2** in **financial systems**).

Based on the information in **Tables 4-2** and **4-3** (see the **Appendix**), the following presents major recycling and educational programs at the District and the peers, as well as key differences in the programs.

Recycling Programs

- **Curbside Recycling Program:** The Mahoning County SWMD offers non-subscription bi-weekly curbside recycling to approximately 80,000 households in Mahoning County through an agreement with the Carbon Limestone Sanitary Landfill. There is no cost to residents or the District to operate this program. The District also promotes a pay-as-you-throw (PAYT) program, where residents are charged a fee per bag of trash they set out on the curb (only pay for the trash actually disposed). Residents selecting the PAYT option are provided curbside recycling services at no cost as a method to promote disposing less waste. However, the Assistant Director indicated that despite the District's attempts to promote this program through educational materials, the participation rate has been low. For example, the District estimates that only 959 households in Mahoning County are currently participating in the PAYT program. This equates to only 0.9 percent of total households, based on the number of households reported by the U.S. Census Bureau in 2000 for Mahoning County.

The Clark County SWMD also offers a PAYT program. The Director there indicates that approximately 20 percent of the households in Clark County currently use this system and that the Clark County SWMD is actively promoting this program through advertisements and educational materials. According to the Federal EPA, municipalities often see a 25 to 35 percent decrease in waste and significant increases in recycling when implementing PAYT. A representative from the Ohio EPA also indicated that this is the most productive method of curbside recycling. **Table 4-1** shows that the Clark County SWMD has the highest residential recycling rates among the peers.

- **Collection Drives (includes tire and electronic collections):** In 2005, the District held a variety of specialty collection drives (i.e., paper, electronics, and tires) at a total cost of \$141,823 (approximately 9 percent of the District's recycling budget). The majority of the costs were due to the District awarding the City of Youngstown an \$80,000 grant for tire clean-up throughout the City. The majority of the remaining costs are associated with the District's office paper program, which provides businesses with recycling bins to collect office paper. A total of 240 businesses participate in this program.

Table 4-2 shows that although the District's tire collection costs declined significantly in 2006 (expiration of tire collection grant), its expenditures for electronics and other specialty collection drives increased significantly. The Assistant Director indicated that the increase is due to the District expanding the office paper recycling program and holding more electronics collection drives. **Table 4-2** also shows that the District spent more than each of the peers on tire, electronics and other specialty collection drives in 2005 and 2006. According to the National Recycling Coalition, most municipal electronics collection drives are periodic or one-time events, although curbside collection and permanent drop-off options are growing in popularity. Currently, no specialty items can be collected through the District's curbside recycling services. However, the Assistant Director indicated that some of the drop-off sites will accept items such as batteries and vehicle oils.

- **Drop-Off Sites/Recycling Centers:** **Table 4-2** shows that the Mahoning County SWMD operates more drop-off sites than the peers. For example, the District had a total of 24 drop-off sites located throughout Mahoning County in 2005, while the Clark County SWMD had only one drop-off site. In addition, Lake County SWMD and Summit/Akron SWMA rely solely on the respective cities and communities to operate drop-off sites, and do not dedicate any of their resources to this function. The Assistant Director at the Mahoning County SWMD indicated that the District's drop-off sites have provided a productive recycling program. As a result, the District increased the number of drop-off sites to 35 in 2006. However, despite the increase in the number of drop-off sites, **Table 4-2** shows that the District's expenditures for drop-off sites decreased by 17 percent in 2006. The Assistant Director attributed the decrease to the District purchasing many of the drop-off bins at the end of 2005 but not using them for operations until 2006. The District contracts with recycling coordinators to oversee and maintain each of the drop-off sites. The Assistant Director indicated that the recycling coordinators are also available to answer questions from the residents about recycling and that some coordinators are responsible for more than one drop-off site. As a result, there may not always be a staff member present at each drop-off site.

While the Mahoning County SWMD and Lake County SWMD dedicate a significant portion of their budgets to maintaining drop-off facilities and curbside recycling, the Summit/Akron SWMA dedicates a considerable portion of its budget (36 percent in 2005) to operating a recycling center. The Summit/Akron SWMA's recycling center is open six months out of the year and is primarily used for the collection of household hazardous waste (HHW). However, residents can also drop off electronics, tires, and other commingled products (i.e., aluminum, paper, etc.) at the center. The Director of the Summit/Akron SWMA indicated that the recycling center is one of the Summit/Akron SWMA's most productive recycling programs. In addition, the Clark County SWMD began operating a recycling center at the beginning of 2007. The recycling center accepts tires, electronics, latex paint, and other commingled products and is open year-round. By maintaining central recycling centers, the Summit/Akron SWMA and the Clark County SWMD are able to minimize the number of special collection drives that are needed for items such as tires, electronics, HHW, and other similar materials.

According to the *Best Practices in Plastics Recycling* (Clean Washington Center, 1997), there are two basic types of drop-off recycling sites. The first are self-serve drop-off programs, where there is no staff at the collection site to monitor collections. The second are sites that are only open when a staff member is present. Increasingly, staffed sites are considered the best practice. Staffed sites can greatly reduce material contamination and increase material value, decrease the financial costs associated with vandalism at unattended sites, provide minimal densification processing to increase collection efficiencies and transportation economics, and provide "one-on-one" community education on recycling. Combined, these benefits can improve program economics beyond the cost of funding staff.

- **Household Hazardous Waste Collections:** Table 4-2 shows that the District held two household hazardous waste (HHW) collection drives in 2005 and one in 2006. By comparison, Lake County SWMD holds two HHW collection drives annually and Clark County SWMD holds one HHW collection drive every other year. The Summit/Akron SWMA uses the recycling center to collect household hazardous waste and does not hold any special HHW collection drives. According to a representative from the Ohio EPA, although there are environmental benefits to holding HHW collection drives, these programs can be very expensive and do not necessarily result in a high percentage of materials being recycled. The Director of the Mahoning County SWMD indicated that although the HHW collections may not yield a high percentage of materials being recycled, each solid waste management district is required to address the safe disposal of HHW.

- **Yard Waste Management:** **Table 4-2** shows that the Mahoning County SWMD is the only entity that operates a yard waste management program. In 2006, the District awarded a grant to Austintown Township for the collection of leaves. The Assistant Director indicated that the District plans to increase the number of municipalities participating in this program in the future. A representative from the Ohio EPA indicated that yard waste management programs can provide the District with a considerable amount of recyclables that the District can use toward improving its recycling rates.
- **Recycling Market Development:** The Mahoning County SWMD has a competitive program that provides funding to local governments and institutions to increase their participation in recycling activities. The District spent 29 percent of its budget on recycling market development activities in 2005. In 2006, the District reduced the total amount of competitive funding by 76 percent. The Assistant Director indicated that the large decrease was the result of the District developing more stringent eligibility requirements. The Assistant Director also indicated that the grant amounts in 2005 were inflated due to certain 2004 obligations that were not paid until 2005. **Table 4-2** shows that the Summit/Akron SWMA and Clark County SWMD also provide funding to local governments and other institutions to promote recycling activities. For example, the Summit/Akron SWMA donated money to one facility to aid in the purchase of extrusion equipment that processes plastic recyclables. **Table 4-2** also shows that although the District's recycling market development expenditures per citizen are higher than the peers, it dedicated 10 percent of the recycling program budget to this function in 2006, which is similar to Summit/Akron SWMA (10 percent) and lower than Clark County SWMD (19 percent) for 2005.
- **Other:** The Mahoning County SWMD has several agency contract agreements that are included in the other line-item. For instance, the District sponsors the Youngstown State University (YSU) re:CREATE program. This program is a materials exchange program that allows residents to drop-off unwanted furniture at YSU. The University subsequently donates these items to other organizations that can make use of the furniture. The District also accounts for the drop-off bin lease agreements in the other line-item. The lease agreements cover the cost of leasing the area and maintaining the drop-off sites. The District spent 33 percent of its recycling budget on agency contract agreements in 2005 and 49 percent in 2006. By comparison, Clark County SWMD and Summit/Akron SWMA spent 17 percent and 49 percent of their budgets on other services, respectively. However, Clark County SWMD and Summit/Akron used these monies for different purposes. For example, the Director at Clark County SWMD indicated that costs in the other line-item are associated with operating the Business Waste Reduction Program, whereby private consultants are hired to perform waste audits for area

businesses. The Director of Summit/Akron SWMA indicated that the costs in the other line-item are due to a contract with the City of Akron to assist in paying for the closure and post closure care of the City's landfill.

Educational Programs

- **School District Activities:** The Mahoning County SWMD focuses the majority of its educational efforts on conducting school building presentations. For example, the District conducted a total of 376 school presentations in 2005 and 454 presentations in 2006. The District also sponsors promotional activities that reinforce recycling at a young age and result in financial benefits for the school district. For example, the cash for cans contest encourages local schools to compete against one another for fun and prizes, while all monies received from the collection are returned to the participating schools. Similar to the Mahoning County SWMD, Lake County SWMD and Summit/Akron SWMA focus the majority of their educational efforts on conducting school building presentations. For example, **Table 4-4** shows that Lake County SWMD and Summit/Akron SWMA conducted a total of 198 and 100 school presentations, respectively. Although Clark County SWMD does not conduct school building presentations, it promotes the importance of recycling through the use of newsletters, curriculum and activity kits, and awarding grants to schools for educational waste reduction support.
- **Educational Workshops:** **Table 4-3** shows that Mahoning County SWMD is the only entity that offers educational workshops for educators. The District's educational staff conducts the workshops and presents workbooks, CD-ROMs, teaching agendas and field trips to educators who subsequently use the materials to develop classroom programs. **Table 4-3** shows that the District conducted five teacher workshops in 2005 and three workshops in 2006. The Clark County SWMD attempted to conduct an educational workshop; however, the Director indicated that the workshop was canceled due to low registration. The Summit/Akron SWMA conducted a workshop on recycling for science teachers in 2005. However, the Director indicated that it is no longer conducting educational workshops due to low attendance. Lake County SWMD did not conduct any educational workshops in 2005. Although the peers do not regularly schedule educational workshops, they have designed their websites to include kid's pages that consist of educational games, contests, books and other materials designed to creatively inform children and their parents about the importance of recycling. In addition to a kid's page, the Cuyahoga County Solid Waste Management District includes classroom materials and other curriculum references for teachers on its website. By designing websites to include kid's pages and educational materials, the peers are able to provide educational materials to children, parents and

teachers without incurring the expense of conducting workshops (see **R2.5** within the **financial systems** section).

- **Public Presentations:** Mahoning County SWMD and the peers all conduct presentations on a variety of different recycling topics. In 2005, Mahoning County SWMD participated in 92 public presentations. In 2006, the District reduced the number of presentations to 72. The Assistant Director indicated that the decline is due to the District re-locating its offices in 2006, which subsequently limited the ability of the educational staff to complete presentations for a two-month period. Clark County SWMD and Summit/Akron SWMA conducted a total of 26 and 71 public presentations, respectively. Lake County SWMD is currently partnering with the Metro Park system to conduct 12 presentations on recycling.
- **Yard Waste Education:** Table 4-3 shows that Mahoning County SWMD is the only entity that offers educational workshops on yard waste management. Although Clark County SWMD does not offer yard waste educational workshops, it promotes the benefits of yard waste recycling through the use of brochures and articles in newspapers and newsletters. Similarly, Summit/Akron SMWA's website includes pages explaining the benefits of yard waste recycling and provides a listing of area landscapers that will accept yard waste for composting purposes. The Assistant Director at Mahoning County SWMD indicated the yard waste management workshop is one of the District's most popular programs and that attendance for this workshop has been very high. As a result, the District increased the number of yard waste management workshops in 2006.
- **Other Outsource Efforts:** Mahoning County SWMD sponsors a "Get Caught Recycling" promotional activity where area businesses donate gift certificates to the District. If a person is seen recycling while a District representative is visiting the drop-off site, the person receives a gift certificate. In 2005, the District awarded approximately \$100 in gift certificates to individuals who were seen recycling. In 2006, the District identified ten individuals recycling and awarded each a \$5 gift certificate. According to a representative from the Ohio EPA, the best educational programs are those that are combined with incentive based programs, such as the District's "Get Caught Recycling" program. None of the peers offer this type of promotional activity.

While the District uses incentive-based programs to increase recycling awareness, Clark County SWMD and Lake County SWMD focus on sponsoring community projects. For instance, Clark County SWMD has a model community project where two communities a year are targeted with the goal of increasing recycling efforts. In 2005, Clark County SWMD made improvements to the public roads

and parks in the two communities by using recycled materials received through the model community program. The Director of Clark County SWMD indicated that this program has been very beneficial. Lastly, Lake County SWMD sponsors a recycling day at a minor league baseball game. The District purchased ten containers to place throughout the ballpark to collect aluminum cans and plastic bottles.

According to the publication *Recycling Best Practices Manual* (Environmental Planning Consultants, 2007), many communities have been extremely creative in finding ways to advertise their recycling programs and educate the public about how to participate, while keeping costs under control. Examples include the following:

- **Electronic media:** TV spots and radio ads run as public service messages; interviews with the mayor and/or recycling program director about the start-up, enhancement or success of the program; public access TV;
- **Print media:** Public service ads in newspapers, local magazines and shopper guides; interviews and articles about the program;
- **Outdoor advertising:** Bus banners, bus shelter ads, billboards;
- **Other community advertising and education:** Movie theater pre-show advertising; promotional videos made specially for the recycling program to show in local venues; school and kids events; educational materials at collection sites; community art contests and displays with art and sculptures made from materials collected in the recycling program;
- **Recycling program:** Multi-color pictures imprinted directly into the collection carts; decals and labels on the collections carts; ads and signs on garbage and recycling trucks; inserts in customer bills; refrigerator magnets; recycling guide brochures; instruction cards that can be attached by magnet or adhesive backing to household appliances or cupboards;
- **Internet:** Recycling program website;
- **Newsletters:** Highly graphic with colors and designs consistent with the program's promotional material. Some use mascots or historical tie-ins, Q&A columns, activities for kids. Include a phone number and email addresses so that readers can get questions answered and provide feedback; and
- **Participation in public events:** Festivals, parades, neighborhood special events, Earth Day activities, puppet shows, local and state fairs.

Although the District is completing some of the activities identified by the *Recycling Best Practices Manual* (Environmental Planning Consultants, 2007), there are certain suggestions which may help the District convey the importance of recycling, such as updating the website (see **R2.5** in *financial systems*) and advertising through various mechanisms (e.g., movie theaters, radio messages and billboards).

According to the Maine State Planning Office, education is arguably the most important part of a recycling program. Because education is so crucial to a program's success, it is important to carefully plan how to best communicate with the residents. In addition, the Maine State Planning Office indicates that solid waste districts should review the effectiveness of their educational activities through surveys, tonnage reports, contamination levels, and citizen feedback to ensure that the message is being received and that participation is increasing.

Although the District reviews programs for funding purposes through the annual budget development process, the District does not conduct formal cost-benefit analyses to demonstrate that each recycling and educational program is achieving the intended results at an acceptable price. In addition, **R2.6** in the **financial systems** section indicates that the District does not regularly use citizen surveys as a way to measure satisfaction with programs and services.

Appendix

Tables 4-2 and 4-3 present detailed information on recycling and educational programs offered by Mahoning County SWMD and the peers. Information from these tables was used in the analysis in R4.1 by highlighting significant differences in programs at the District, when compared to the peers.

Table 4-2: Recycling Programs Offered by Type

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Curbside Recycling Program				
Curbside recycling is offered free of charge to approximately 80,000 households. The District receives this through an agreement with the Carbon Limestone Sanitary Landfill. There is no cost to the District or citizens to operate this program. The District estimates the value of this contract to be more than \$900,000 annually.	Curbside recycling is offered to approximately 80,000 households free of charge. The District receives this service through an agreement with the Carbon Limestone Sanitary Landfill. There is no cost to the District or citizens to operate this program. The District estimates the value of this contract to be more than \$900,000 annually.	Curbside recycling is offered to residents through trash haulers. The District also offers a pay-as-you-throw program through trash haulers. There is no cost to the District for these services. (Residents either pay a flat rate or volume based rate for this service depending upon the community.)	Curbside recycling is provided to all communities in Lake County. Of the 23 communities in Lake County, 21 elected to use the District's curbside program. The total cost to the District was \$1,517,219, which amounts to \$6.63 per citizen.	Curbside recycling is available to residents in 24 of the 31 communities throughout Summit County. The residents receive this service through their respective trash haulers (residents in 7 communities have to pay for this service). There is no cost to the Authority for curbside services.
Collection Drives				
The District holds different specialty collections for electronics, paper, appliances, etc. The total cost to the District was \$54,008, which amounts to \$0.21 per citizen.	The District holds different specialty collections for electronics, paper, appliances, etc. The total cost to the District was \$79,919, which amounts to \$0.32 per citizen.	The District did not hold any specialty collection drives.	The District holds different specialty collections for electronics, tires, etc. The total cost to the District was \$7,792, which amounts to \$0.03 per citizen.	The Authority holds different collection drives for tires, computers, etc. The total cost to the Authority was \$55,194, which amounts to \$0.10 per citizen.
Central Recycling Center				
The District does not have a central recycling center.	The District does not have a central recycling center.	The District did not have a recycling center in 2005. However, the District incurred costs of \$24,332, which amounts to \$0.11 per citizen. This expense was for the purchase of equipment for their new recycling center that opened in 2007.	The District does not have a recycling center.	The Authority runs a household hazardous waste collection recycling center six months a year. The total cost of this center is \$502,879, which amounts to a cost of \$0.92 per citizen.

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Drop-off Sites				
<p>The District had 24 drop-off sites located throughout Mahoning County. The total cost of the drop-off sites was \$386,509, which amounts to \$1.53 per citizen.</p>	<p>The District increased the number of drop-off sites to 35. The total cost of the drop-off sites was \$322,041, which amounts to \$1.27 per citizen.</p>	<p>The District has one drop-off site. The total cost of the drop-off site in 2005 was \$10,514, which amounts to \$0.08 per citizen.</p>	<p>The District did not have any drop-off sites in 2005. However, communities have the option of providing their own drop-off sites for their residents.</p>	<p>There are 19 drop-off sites located in Summit County. These drop-off sites are privately run by the respective cities and there is no cost to the Authority for this program (the municipalities have chosen to incur the cost).</p>
Tire Collection				
<p>The District has two county tire drives per year. The first four tires are free and then citizens are charged \$1.50 per tire. The District also provided the City of Youngstown with an additional \$80,000 to assist in removing waste tires throughout the City. The District's total cost of tire collections was \$87,815, which amounts to \$0.35 per citizen.</p> <p>The District also used ODNR grants to allow four municipalities to hold their own tire collections. This cost is not included in the \$87,815 reported above.</p>	<p>The District has two county tire drives per year. The first four tires are free and then citizens are charged \$1.50 per additional tire. In addition, the District provided grants to six cities/townships to hold their own tire collections. The total cost to the District was \$14,996, which amounts to \$0.06 per citizen.</p>	<p>The District held one tire collection in 2005. The first four tires are free and then citizens are charged \$1.00 per additional tire. In addition, there is a \$5.00 fee for tires without rims. The total cost to the District in 2005 was \$4,770, which amounts to \$0.02 per citizen.</p>	<p>The District has one annual tire collection at the Lake County Fairgrounds. The cost to the citizens is free up to six tires and then citizens are charged \$2.00 per additional tire. In addition, there is a \$4.00 fee for tires without rims and a \$10.00 fee for oversized tires. The total cost to the District was \$6,807, which amounts to \$0.03 per citizen.</p>	<p>The Authority held one tire collection for a total cost of \$10,556, which amounts to \$0.02 per citizen.</p>
Household Hazardous Waste Collection				
<p>The District held two household hazardous waste collections in 2005 for a total cost of \$101,113, which amounts to \$0.40 per citizen.</p>	<p>The District held one household hazardous waste collection in 2006 for a total cost of \$51,314, which amounts to \$0.20 per citizen.</p>	<p>The District holds one household hazardous waste collection every other year. The total cost to the District was \$34,818 (annual average = \$17,409), which amounts to \$0.24 per citizen.</p>	<p>The District holds two household hazardous waste collections a year. The total cost to the District was \$142,113, which amounts to \$0.62 per citizen.</p>	<p>The costs associated with the operation and disposal of the Authority's household hazardous waste collections are recorded under the recycling center.</p>

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Electronics Collections				
<p>The District held one electronic drive in 2005. The costs associated with this program are captured in the collections drive line-item.</p>	<p>The District increased the number of electronic drives to 16 for a total cost of \$13,000, or \$0.05 per citizen. The majority of the costs associated with this program are captured in the collections drive line. One of the electronic drives was funded through an ODNR grant.</p>	<p>The District did not hold any electronic collections.</p>	<p>The District holds one electronic collection a year at a cost of \$3,000, which amounts to \$0.01 per citizen</p>	<p>The costs associated with the Authority's electronic collections are captured in the recycling center.</p>
Yard Waste Management				
<p>The District did not have a yard waste management program in place in 2005.</p>	<p>The District provides municipalities in the County with funds to cover the costs of collecting residents' leaves. The total cost to the District was \$21,520, which amounts to \$0.09 per citizen.</p>	<p>The District does not have a yard waste management program.</p>	<p>The District does not have a yard waste management program.</p>	<p>The Authority does not have a yard waste management program.</p>
Recycling Market Development				
<p>The District spent \$480,323 on recycling market development activities, which amounts to \$1.90 per citizen. The District provides funding to local governments, educational institutions, and non-profit organizations for solid waste reduction. These costs also include a portion of money that was promised to entities in 2004, but was not paid-out until 2005.</p>	<p>The District spent \$116,993 on recycling market development activities, which amounts to \$0.46 per citizen. The District awarded 48 separate mini-grants in 2006.</p>	<p>The District spent \$21,800 on recycling market development activities, which amounts to \$0.15 per citizen.</p>	<p>The District does not have any recycling market development costs.</p>	<p>The Authority runs a waste reduction grant program that provides funding for commercial facilities to purchase recycling equipment. The Authority awarded \$140,000 in grants, which amounts to \$0.26 per citizen.</p>

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Other				
The District spent \$550,885 (\$2.18 per citizen) on various other contract agency agreements, such as the YSU re:CREATE program, the business recycling program, and the dump and run program.	The District spent \$575,867 (\$2.28 per citizen) on various other contract agency agreements, such as the YSU re:CREATE program, the business recycling program, and the dump and run program.	The District spent \$19,522 on various other recycling programs, which amounts to \$0.14 per citizen. For example, the District uses a private consultant to conduct professional waste audits for businesses.	The District does not have any other costs associated with their recycling programs.	The Authority has a contract with the City of Akron to assist in paying the cost of closure and post closure care for a landfill in Akron. The total cost to the Authority was \$690,240, which amounts to \$1.26 per citizen.

Source: District interviews and Solid Waste Management Plans

Table 4-3: Educational Programs Offered by Type

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
School District Activities				
The District conducted a total of 376 presentations on recycling and litter prevention at schools located in Mahoning County. The District also sponsors contests and games for area students to promote recycling education. Examples include Recycling Jeopardy, cash for cans and Plastic Recycling Mania.	The District conducted a total of 454 presentations on recycling and litter prevention at schools located in Mahoning County. The District also sponsors contests and games for area students to promote recycling education. Examples include Recycling Jeopardy, cash for cans and Plastic Recycling Mania.	The District provides two newsletters to every teacher (4,000 copies) with information regarding school recycling, presentations, mini-grants, etc. In addition, 35 schools requested classroom activity kits and curriculum materials for their classrooms. The District also awarded five mini-grants (\$500 each) to schools for educational waste reduction support. However, the District did not conduct any school presentations.	The District conducted a total of 198 school presentations on recycling and litter prevention. They also produce a special newsletter that is given to teachers throughout the public schools in Lake County.	The Authority conducts a variety of activities in their school districts. For instance, the Authority conducts a puppet show on recycling in grades K-2. In grades 9-12, the Authority holds a panel presentation where students can learn about careers in environment management. The Authority conducted a total of 100 school presentations.

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Informational Brochures				
<p>The District distributes brochures at government buildings and drop-off bin locations that provide information concerning the District's curbside and drop-off site recycling programs. In addition, the District distributes fliers at public events, such as fairs, workshops, etc., that explain the specialty collections and includes a calendar of events. They also have a resource library that houses environmental books, magazines, and videos. The District also participates in a joint venture with the Mahoning County Soil and Water Conservation District to produce the Mahoning Matters newsletter.</p>	<p>The District distributes brochures at government buildings and drop-off bin locations that provide information concerning the District's curbside and drop-off site recycling programs. In addition, the District distributes fliers at public events, such as fairs, workshops, etc., that explain the specialty collections and includes a calendar of events. They also have a resource library that houses environmental books, magazines, and videos. The District also participates in a joint venture with the Mahoning County Soil and Water Conservation District to produce the Mahoning Matters newsletter.</p>	<p>The District distributes <i>Trim Your Waste</i> brochures at local events and in the four Clark County Public Information Racks. In addition, the District produces a buy recycled catalog that is posted on their website.</p>	<p>The District puts together welcome packets for new residents, and a listing of walk-in recycling and buyback centers. In addition, newsletters are prepared for each of the communities' public service directors.</p>	<p>The Authority has a staff member that writes articles on recycling and the environment for the local newspaper and trade publications.</p>
Website Development				
<p>The District uses its website to inform the public about recycling programs. In addition, area businesses can use the website to access the materials exchange database, which allows users to swap goods and materials without disposing them in the landfill. However, the website is missing certain information such as a kid's page. See R2.5 in financial systems.</p>	<p>The District uses its website to inform the public about recycling programs. In addition, area businesses can use the website to access the materials exchange database, which allows users to swap goods and materials without disposing them in the landfill. However, the website is missing certain information such as a kid's page. See R2.5 in financial systems.</p>	<p>The District uses its website to inform the public about the recycling programs available throughout the County.</p>	<p>The District uses its website to outline the District's programs and other pertinent information.</p>	<p>The Authority uses its website to inform the public about their recycling programs.</p>

Mahoning 2005	Mahoning 2006	Clark 2005	Lake 2005	Summit/Akron 2005
Educational Workshops				
The District's education staff conducts workshops titled "Windows on Waste" and "Investigating Solid Waste Issues" for educators within Mahoning County. The District conducted a total of five workshops on these topics.	The District's education staff conducts workshops titled "Windows on Waste" and "Investigating Solid Waste Issues" for educators within Mahoning County. The District conducted a total of three workshops on these topics.	The District attempted to conduct a teacher workshop; however, the response rate was low. As a result, the District has eliminated this program going forward.	The District did not sponsor any educational workshops.	The Authority held one workshop for science teachers in 2005. However, the Authority is no longer offering this workshop due to a low participation rate.
Public Presentations				
The District held 92 public presentations for outside groups such as agricultural groups, senior citizens, and insurance groups on the importance of recycling. The District also held 10 recycling open houses/customer appreciation days and 11 township government meetings.	The District held 72 public presentations for outside groups such as agricultural groups, senior citizens, and insurance groups on the importance of recycling. The District also held 10 recycling open houses/customer appreciation days and 8 township government meetings.	The District held 26 public presentations on recycling, waste reduction, and litter prevention.	The District partners with the Metro Parks to conduct 12 presentations on recycling.	The Authority held 71 public presentations on a variety of different recycling initiatives.
Yard Waste Education				
The District held 5 composting seminars.	The District held 6 composting seminars.	The District produced four brochures and an article in the fall about leaf composting.	The District does not offer any educational programs on yard waste.	The Authority does not offer any educational programs on yard waste.
Other outreach efforts				
The District sponsors a placemat contest for students in grades 1-8. Students design placemats that have an environmental theme. Awards and certificates are granted for winners in each grade. The District also runs a promotional activity called "Get Caught Recycling," and participates in local parades and fairs.	The District sponsors a placemat contest for students in grades 1-8. Students design placemats that have an environmental theme. Awards and certificates are granted for winners in each grade. The District also runs a promotional activity called "Get Caught Recycling," and participates in local parades and fairs.	The District has a model community program that targets at least two communities to provide a year long focus to increase overall program awareness and participation. The District also sponsors Earth Day and Adopt-a-Road programs.	The District sponsors a Recycling Day at the Lake County Captains baseball games. The District also provides public education and information programs on household hazardous waste.	The Authority sponsors poster design contests for high school students where the winner receives a plaque and their design is posted on a billboard. Additional cash prizes are also awarded to the second and third place winners.

Source: District interviews and Solid Waste Management Plans

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Client Response

The letter that follows is the Mahoning County Solid Waste Management District's official response to the performance audit. Throughout the audit process, staff met with County officials to ensure substantial agreement on the factual information presented in the report.

CHAIRMAN POLICY COMMITTEE
Commissioner Anthony Traficanti

COUNTY COMMISSIONERS
David Ludit
John McNally
Anthony Traficanti, Chairman

POLICY COMMITTEE
members representing
Mahoning County
City of Youngstown
Board of Health
Township Trustees
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October 22, 2007

Mr. William Rouse
Senior Audit Manager
615 W. Superior Avenue, NW
12th Floor
Cleveland, Ohio 44113

Dear Mr. Rouse,

Thank you for the opportunity to meet and discuss the recommendations and noteworthy accomplishments outlined in the draft of the performance audit of the Mahoning County Solid Waste Management District. This worthwhile project has provided the District and stakeholders the opportunity to acknowledge the successes of the programs, strengths of new management, and define areas for improvement. The Assistant Director and I have responded below in detail to the comments and suggestions contained in the audit draft.

AUDIT DRAFT REPSONSE

The most striking element in the Performance Audit is the dramatic increase in the quantity of recyclable materials that were diverted from the solid waste stream between the years 2005 and 2006. The weights below include residential, commercial, and industrial recycling totals.

<p><u>2005 – 84,683 tons</u> <u>2006 – 193,320 tons (actual and approved weight)</u> 202,346 tons was the projected weight as explained in the Executive Summary.</p>

This represents a **128% increase** in just one year through the new recycling initiatives that were developed in 2005 and fully implemented in 2006. The District anticipates continued increases in recycling tonnages.

As the District significantly increased its main output – recycling tonnage, it decreased personnel costs by **19%** from 2004 to 2007. In fact, Table 3-3, P. 3-6, shows the *personnel costs per ton of waste recycled* to have dropped from \$7.83 to \$2.78 per ton.



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Specific Comments on Recommendations

Landfill Oversight Project

As per the recommendation regarding landfill inspections, the District contracts with the Mahoning County Board of Health to conduct landfill inspections and well water testing. Since becoming Director in 2005, I have desired implementation of a program to provide oversight of In-District landfill scale houses in an effort to check origination and verify fees. In 2007, the District, in cooperation with the Board of Health and the Mahoning County Sheriff's Litter Law Enforcement Deputies, instituted an oversight program that will help the District insure that accurate "point of generation" information is being provided to landfill scale house personnel and to the District.

As noted in the document, the District lacks the legal authority to go onto a private landfill facility for inspection purposes, thus the partnership with the Board of Health and Sheriff's staff is vital.

Website Update

The District's Green Team website was moved to the Mahoning County domain in 2006 in an effort to standardize county department websites. This has resulted in challenges in communication and interaction through the website. The District is currently working with the Mahoning County Information Technology Department and District staff to implement changes in the District website. Improvements already enhancing the website include the on-line posting of the Mahoning Matters newsletter, updated calendar of events, Policy Committee meeting dates and improved information on recycling opportunities. In the future, the District will use quantifiable performance measurements in evaluating programs by providing an opportunity for residents, school officials, businesses, and other entities that utilize our programs to complete feedback forms or surveys via the website. The District also intends to develop an education activity page for educators and children. This page will inform residents about educational programs the District offers as well as provide fun and informative activities for children to learn about waste reduction and recycling.

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Citizens
Industry

DIRECTOR
Jim Petuch



**GREEN
TEAM**

Recycling Division of
Mahoning County

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Financial Systems: Contractual Adjustments for Mahoning County Board of Health and Mahoning County Engineer

Per the recommendations presented under Financial Systems (R2.2), the District will revise the contracts for Mahoning County Board of Health and Mahoning County Engineers to one year contracts. This will be implemented in 2008. The Mahoning County Solid Waste Management District has already initiated change in billing requirements for the Board of Health, and these detailed invoices will provide a clear, itemized cost per activity including personnel costs and overhead costs. This detailed invoicing will become a requirement in the contract terms and conditions. Reimbursement for services rendered will be on a quarterly basis.

The Mahoning County Engineer does provide an annual list of proposed haul roads and subsequent cost per foot of improvements for material. Beginning in 2008, the District will require copies of bid contracts and costs of work performed for haul road maintenance, including the breakdown of costs of materials and labor. The Solid Waste District will consider modifying the payment terms under this contract provided it does not impact state funding requirements or affect preference for economy of scale procurement.

It is very important that readers note that in Table 2-2, P. 2-5, "Expenditures per Ton Recycled", that the District's comparison to the peers is significantly burdened by the amount of funds provided to the Board of Health (\$455,624 in 2006) and Engineer's Department for repair and maintenance of haul roads near landfills (\$415,000.00 in 2006). If these expenditures are eliminated for comparative analysis, the District's cost per ton recycled would be \$10.67, not \$14.97. Both expenditures are a priority, thus the District will continue to provide funds to the Board of Health and Engineers for purposes as per the allowable uses of solid waste revenue defined by the Ohio Revised Code.

Surveys and Cost Benefit Analysis

The District will use quantifiable performance measurements in evaluating programs, and will provide an opportunity for residents, school officials, businesses, and other entities that utilize our programs, to complete feedback forms or surveys so that we may better determine the effectiveness of various programs and activities. In 2008, there will be a survey posted on our website for immediate feedback. Presently, the District does collect data on source of information from callers, records the number of calls per week and the type of inquiry.



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Finally, I am extremely proud of the "Programs and Contract Management" section where we are compared to our peers. It should be noted that;

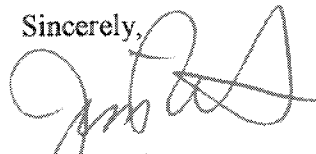
- 1) We are the only one offering FREE curbside recycling at NO cost to the District – 80,000 homes.
- 2) We have more community drop-off recycling sites.
- 3) We provide more electronics recycling drives.
- 4) We are the only District to provide leaf collection/yard waste programs to various communities.
- 5) We provide more educational programs.
- 6) We provide more workshops including those for composting.
- 7) We are the only one providing FREE paper/publication recycling to commercial enterprises.

We are providing more services to our residents, businesses, and industries, yet the amount of funds in 2006 spent on recycling programs was only 39.1 % of our total budget verses the peer average of 48.8%. Prior to 2005, the District's recycling level was very low, yet the personnel costs were exceedingly high and expenditures on non-recycling related matters were excessive.

Under new management and development of innovative programs, the District has cut personnel and other related costs while significantly increasing recycling.

We believe it is clearly evident from this audit that the District has been heading in the correct direction since 2005, and we look forward to improving in all areas of service and cost effective management.

Sincerely,



Jim Petuch
Director



**Auditor of State
Mary Taylor, CPA**

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